NPS-CM-10-159

ACQUISITION RESEARCH SPONSORED REPORT SERIES

A New Paradigm to Address Bid Protests

2 August 2010

by

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ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
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Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
02 AUG 2010		**00-00-2010 to 00-00-2010**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
A New Paradigm to Address Bid Protests	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
Naval Postgraduate School,Defense Resources Management Institute (DRMI),699 Dyer Road Room M5,Monterey,CA,93943	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

The goal of this study is to offer senior decision-makers a useful framework to evaluate, articulate, and recommend modifications of the government???s bid protest policy to improve procurement outcomes. Most countries allow disappointed bidders to protest public procurement decisions as an oversight mechanism to minimize fraud and errors by procurement officials. The expectation is that allowing bid protests increases transparency and accountability and encourages competition reducing the cost of public purchases. A key contribution of this study is to add an economics dimension to a bid protest process that is mostly thought of in legal terms. The economics approach suggests firms are likely to use the protest process strategically to improve their competitive bargaining position and will be equally strategic in their decision to protest an award. The conclusion is that a firm???s responsibility to its shareholders can lead it to undertake protests for reasons substantially different from, and fundamentally opposed to, the government???s objectives. The economics approach suggests minimizing the risk of protests that result in cost overruns, schedule delays, and performance gaps, while preserving the benefits offered by protests to promote competition and ensure the integrity transparency, and accountability of the procurement process. Adopting an economics perspective reveals two other crucial insights: firms can exploit protests to extract concessions (Fed Mail), and risk-averse officials can overreact in attempts to achieve protest-proof procurements (Buy-offs). In recognizing costs as well as benefits of a protest system, the economics approach invites a review of alternative portfolios of governance mechanisms that complement bid protests (internal audits external audits, independent investigations, alternative dispute resolution, increased training and incentives, etc.), to improve procurement outcomes.

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**149**	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

The research presented in this report was supported by the Acquisition Chair of the Graduate School of Business & Public Policy at the Naval Postgraduate School.

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Abstract

The goal of this study is to offer senior decision-makers a useful framework to evaluate, articulate, and recommend modifications of the government's bid protest policy to improve procurement outcomes. Most countries allow disappointed bidders to protest public procurement decisions as an oversight mechanism to minimize fraud and errors by procurement officials. The expectation is that allowing bid protests increases transparency and accountability and encourages competition, reducing the cost of public purchases. A key contribution of this study is to add an economics dimension to a bid protest process that is mostly thought of in legal terms. The economics approach suggests firms are likely to use the protest process strategically to improve their competitive bargaining position and will be equally strategic in their decision to protest an award. The conclusion is that a firm's responsibility to its shareholders can lead it to undertake protests for reasons substantially different from, and fundamentally opposed to, the government's objectives. The economics approach suggests minimizing the risk of protests that result in cost overruns, schedule delays, and performance gaps, while preserving the benefits offered by protests to promote competition and ensure the integrity, transparency, and accountability of the procurement process. Adopting an economics perspective reveals two other crucial insights: firms can exploit protests to extract concessions (Fed Mail), and risk-averse officials can overreact in attempts to achieve protest-proof procurements (Buy-offs). In recognizing costs as well as benefits of a protest system, the economics approach invites a review of alternative portfolios of governance mechanisms that complement bid protests (internal audits, external audits, independent investigations, alternative dispute resolution, increased training and incentives, etc.), to improve procurement outcomes.

Keywords: Bid protest, transaction costs, Principal-Agent Model

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Acknowledgments

We would like to acknowledge our colleagues and friends at the Defense Resources Management Institute (DRMI), the Graduate School of Business and Public Policy (GSBPP), and the Pentagon for helpful comments and suggestions; the Honorable Jacques Gansler and Dr. Bill Lucyshyn at the University of Maryland for sharing their data; and Chris Simmons for research assistance. We are especially grateful to USAF Cadet Trevor Mendenhall for an excellent summary report of our team meetings and LCDR Paul Benishek and LCDR Benjamin Sheinman, NPS MBA graduates who—sponsored and guided by the team—conducted a survey and wrote an MBA Professional Report on the topic. That research was included in a companion report co-authored by Paul Benishek, Benjamin Sheinman, Max Kidalov, and Diana Angelis, *Better Acquisition Management through Alternative Dispute Resolution (ADR) and Other Best Practices for Preventing and Resolving Bid Protests*. Portions of the companion report also appear in this report. Finally, we are grateful to RADM James Greene (Ret.), Dr. Keith Snider, and the Acquisition Research Program for the financial support to complete this study. The usual disclaimers apply.

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About the Principal Investigator

Dr. Melese earned his BA in economics at the University of California, Berkeley, and his PhD at the Catholic University of Louvain, Belgium. He joined the Naval Postgraduate School (NPS) in 1987 and today is a professor of economics and Deputy Executive Director at the Defense Resources Management Institute (DRMI). He has been an advisor and consultant to the Joint Staff and the Office of the Secretary of Defense, and in 2008, he contributed to the DoD's first *Strategic Management Plan*. He has taught defense management and public budgeting in dozens of countries around the world and has published extensively on a variety of topics. At the request of NATO HQ and the State Department, Dr. Melese has represented the U.S. as an expert in defense management and public budgeting throughout Europe. Also at the request of NATO HQ and with support from the Pentagon, he led an NPS team that organized a major NATO meeting, "Building Integrity and Defense Institution Building," in the United States (Monterey, CA) on the occasion of the 60th anniversary of the alliance.

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Executive Summary

The goal of this study was to offer senior decision-makers a useful framework and perspective to evaluate, articulate, and recommend modifications of the government's bid protest policy to improve procurement outcomes.A key contribution is to add an economics dimension to a process that is mostly thought of in legal terms.

The legal and regulatory literature that underpins the current protest system reflects two fundamental beliefs. Protests (a) deter fraud and errors in government procurements and (b) promote competition. This study explores the first premise through the economist's "principal-agent" framework and explores the second with the aid of a representative bidder model. The aim is to examine opportunities to improve the efficiency and effectiveness of the protest process in order to enhance performance, cost, and schedule outcomes of defense acquisition investments.

In economics, there is no such thing as a "free lunch." Operating a protest system is costly. The substantial costs of protests to the military departments are a significant challenge. This is reflected in the U.S. Air Force's recent experience selecting a vendor for the KC-X aerial tanker.

Along with the well-documented benefits of allowing firms to protest public procurements come significant *opportunity* and *transaction costs*. The goal can be stated as follows: Reduce the risk of protests of critical acquisitions that result in significant cost overruns, schedule delays, and performance gaps, while preserving the benefits offered by protests to promote competition and ensure the integrity, transparency, and accountability of the procurement process.

Adopting an economics perspective reveals two other crucial insights: first, firms can exploit protests as a strategic bargaining tool; second, governments can overreact in attempts to achieve protest-proof procurements. These hidden costs

significantly impact acquisitions. Combined, they substantially increase risks of delays and cost-overruns.

Fortunately, fighting agency errors and corruption and promoting competition can be done in other ways. The economics approach encourages senior leadership to identify and evaluate alternatives to protests that could achieve similar results at a lower cost. Acknowledging the substantial costs of operating a protest system to govern procurements and encourage competition is one of the key insights of the study: There exists an “optimum” rate of protests. The optimum rate of protests offers the most efficient and effective way to encourage competition and ensure the integrity of the acquisition process while guaranteeing the best possible outcomes for our troops and taxpayers.

Although it is not easy to locate this optimum, it is possible to identify and evaluate policies that approach the optimum. One important implication is that a simple, often-stated department objective such as “reducing the rate of successful protests” is not always appropriate. Two additional factors need to be considered. The first is to identify where the department is relative to the optimum. The second involves a careful consideration of how the department might choose to reduce protests. By recognizing the costs as well as the benefits of a protest system, the economics approach invites a review of portfolios of governance mechanisms (internal audits, external audits, independent investigations, ADR, integrity pacts, training, incentives, etc.) that can substitute for (or complement) protests to improve procurement outcomes.

If a military department finds itself in a situation in which it experiences contract challenges above the optimum rate, then the burden of protests outweighs the benefits and reducing the rate of protests is appropriate. This can be accomplished in two ways: by reducing the expected benefits of a protest to a “disappointed bidder” (including by enabling the protester to achieve desired outcomes through other means) or by increasing the expected costs. This is a crucial distinction emphasized throughout this study.

If a military department is below the optimum rate, then the benefits of protests outweigh the extra (opportunity and transaction) costs. In this range, while reducing protests might appear to have positive short-run impacts, it could be at the expense of long-term benefits such as preserving the integrity of the procurement system and encouraging future competition. Remarkably, this report reveals two important cases that demonstrate that even in this range, it is possible to reduce protests and improve long-term outcomes. The key is to carefully consider how the department reduces protests.

This study captures insights from the protest literature, offers a brief overview of the primary U.S. protest process administered by the Government Accountability Office (GAO), and discusses alternative governance mechanisms. Woven throughout are data, examples, and survey results. Two economic frameworks are introduced—the principal-agent model (agency theory) and a representative bidder model. These frameworks reveal two sets of potential change candidates to reduce the risk of protests: factors that reduce the expected benefits to a losing bidder of a protest and factors that raise the expected costs.

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I. Introduction

> If those affected by the breach of rules cannot protest in a meaningful way, the rules have no teeth, and competition is stifled. Without the constraints of bid protests, government contracts will be let based on favoritism…and bribery—as they were before the system was initiated. (Weckstein & Love, 1995)

This study examines opportunities to improve the efficiency and effectiveness of the protest process in order to enhance the performance, cost, and schedule outcomes of defense acquisition investments. The goal is to offer senior decision-makers a useful framework and perspective that allows them to evaluate, articulate, and prescribe protest policy recommendations that improve procurement outcomes.

As expressed in the introductory quotation, the legal and regulatory literature that underpins the current protest system reflects (a) fundamental doubts about whether government officials will exercise proper discretion to the benefit of taxpayers, and (b) a belief that protests promote competition to the benefit of our troops and taxpayers (for example, see Arrowsmith, Linarelli, & Wallace, 2000; Gordon, 2006; Metzger & Lyons, 2007; Troff, 2005). This study explores the first premise through the economist's "principal-agent" framework and explores the second with the aid of a representative bidder model.

According to the Federal Acquisition Regulation (FAR), a protest is defined as:

> a written objection by an interested party to any of the following: (1) A solicitation … by an agency for offers for a contract for the procurement of property or services, (2) The cancellation of the solicitation … (3) An award or proposed award of the contract, (4) A termination or cancellation of an award of the contract. (FAR, 2005, Subpart 33.101; see also U.S.C. 31 § 3551[1])

A distribution of the relative frequency of protests over these four categories would reveal that the majority of protests involve "an award or proposed award of the contract," which is the primary focus of this study.[1]

An underlying hypothesis in the literature is that protests play an important role as a credible, decentralized oversight mechanism for the acquisition process, and that this helps deter procurement errors, fraud, and favoritism, which in turn makes firms more willing and able to compete for government contracts since they are less likely to be excluded for spurious reasons. The presumption that follows is that since competitive markets offer better performance, faster schedules, and cheaper costs, a bid protest process that increases competition can improve procurement outcomes.[2] A key pillar of the federal government's protest process—the Competition in Contracting Act (CICA)—is largely based on this premise.[3] However, the protest process can also be abused to restrict competition.[4]

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[1] This study has this primary purpose in part because this category involves the most time and financial investments by the agency, and in part because bid protests at this stage have a significant impact on the acquisition process.

[2] The economist's "transaction costs" literature questions this assumption, especially when ex-ante competition leads to ex-post monopoly power. The risk is that a winning "foot-in-the-door strategy" later leads to a "hold-up," in which the winning firm makes up any losses from its low initial bid through change orders, etc. (see Melese, Franck, Angelis, & Dillard, 2007) A related piece of literature on "contestable markets" argues that low entry barriers (the degree of asset specificity, the ease of re-competing the contract, etc.) are more important than the number of competitors in obtaining competitive market outcomes (Baumol, Panzar, & Willig, 1982). Because a stated goal of the protest system is to increase vendor participation in procurements (Arrowsmith et. al., 2000), this could be an interesting avenue for future research.

[3] Along with the Federal Acquisition Regulation (FAR Parts 5, 10, 12-15, and 33), the Tucker Act, Title 28, Section 1491 of the U.S. Code, Executive Order No. 12979, *Agency Procurement Protests*, and various case law precedents, the Competition in Contracting Act (CICA) of 1984 (Title 31 of the U.S. Code Sections 3551-3556) is a key pillar of the protest process. The CICA completed the foundation for the modern bid protest structure. The CICA reflects a strong presumption that government purchasing agencies should use competitive procurement techniques to increase opportunities for firms to compete for contract awards. Today, one of the guiding principles of CICA and the Federal Acquisition Regulation (FAR) is to promote competition for government contracts. The CICA laid the foundation for the existing bid protest system. In the CICA, Congress expressly codified the authority of the Government Accountability Office (GAO) to adjudicate procurement protests by disappointed bidders or prospective bidders. Congress directed that "to the maximum extent practicable, the Comptroller General (at GAO) shall provide for the inexpensive and expeditious resolution of protests" (31 U.S.C. § 3554(a)). The CICA gives the GAO authority over bid protests as an

A fundamental challenge identified by the procuring agencies is the significant costs that protests impose on the department. This is reflected in the recent selection of a vendor for the new KC-X aerial refueling tanker.[5] The Defense Department's aim is to reduce the risk of protests of critical acquisitions that result in significant cost overruns, schedule delays, and performance gaps, while preserving benefits offered by the protest system to promote competition and ensure the integrity, transparency, and accountability of the procurement process. An important contribution of this study is to add an economics dimension to a process mostly thought of in legal terms.

> In economics, there is no such thing as a "free lunch." Operating a protest system is costly. The well-documented advantages of allowing firms to protest public procurements also introduce significant opportunity costs and transaction costs. For instance, the Congressional Research Service (CRS) reports that "many … acquisition professionals are concerned that bid protests can delay contract awards … costing millions of dollars [and] preventing government from getting the goods and services it needs when it needs them" (Schwartz & Manuel, 2009, p. 8).

Coined by latest recent Nobel Prize winner in economics, Dr. Oliver Williamson, the term *transaction costs* includes any non-production-related

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inexpensive alternative to formal judicial proceedings. Today the vast majority of protests are filed with the GAO, and that is the principal focus of this study. Over a five-year period from FY2003–2007, 6,931 cases were filed with the GAO—an average of 1,386 per year—while only 328 were filed with the Court of Federal Claims (CFC)—an average of 66 per year (GAO and CFC statistics from Schaengold, Guiffré, & Gill, 2009, p. 255).

[4] For example, in *GTSI Corp. v. Wildflower International, Inc.,* Case No. 1:09cv123 (JCC), memorandum op. at 15, (E.D.Va. Jul. 17, 2009), a Federal district court held that a valid conspiracy claim may exist where a contractor allegedly tried to "punish" a competitor by organizing a campaign to file "baseless" bid protests.

[5] "In FY2008, a single and politically charged protested procurement (the Boeing Company's challenge of a contract awarded by the Air Force to Northrop Grumman for a new fleet of aerial refueling tankers) generated unprecedented interest in the DoD acquisition process" (Joint Analysis Team [JAT], 2009, p.1). The current interest in reviewing the bid protest process is largely due to several high-value, high-visibility protests recently sustained by the GAO (e.g., the combined value of the contracts for the contested aerial refueling tanker [KC-X] and Combat Search & Rescue Replacement Helicopter [CSAR-X] is approximately $65 billion). There is an extensive body of literature that discusses the KC-X and other critical programs that have been subjected to protests (for example, see O'Rourke, 2009).

contracting costs such as the costs of negotiating, monitoring, and managing transactions, and the risk of opportunism (see Melese et al., 2007, and Williamson 1971, 1985, 1979, 1999). Whereas a protest process offers the benefits of an oversight mechanism, it also involves significant opportunity costs and transaction costs. For example, in an August 2007 memo, then-Acting Under Secretary of Defense for Acquisition, Technology, and Logistics John Young wrote,

> Protests are extremely detrimental to the warfighter and the taxpayer. These protest actions consume vast amounts of time [i.e., opportunity costs] of acquisition, legal, and requirements team members; [and] delay program initiation and the delivery of capability [i.e., transaction costs]. (Schwartz & Manuel, 2009, p. 8)

The economics approach would encourage senior leadership to identify and evaluate alternatives to protests that might achieve similar benefits at lower costs.

Adopting an economics perspective would reveal two other crucial insights—each an unintended consequence that further increases the costs of a protest system. First, protests can be exploited by firms as a strategic bargaining tool, resulting in situations in which private gains defeat the public interest. Second, governments can overreact (with a consequent risk of ballooning transaction costs from over-deterrence) to avoid protests.[6] The government's goal of fighting agency errors and corruption and promoting competition can be done in other ways. By recognizing the potential costs as well as benefits of a protest system, the economics approach considers alternative governance mechanisms (internal audits, external audits, independent investigations, GAO advisory opinions and technical assistance under title 31 section 526 and 717, ADR, investments in training and

[6] Government agencies can overreact by tacitly condoning the protest in various ways, from failure to manage the protest process in a businesslike fashion through dispute resolution flexibilities, alternative dispute resolution (ADR), and all available legal defenses, or from litigation strategies aimed at "buying" a GAO or judicial validation of agency decisions at the expense of the program. In the alternative, government agencies may be trying to excessively protest-proof their procurement to such an extent that protest-proofing displaces obtaining value as a procurement goal.

incentives, greater use of Executive Order No. 12979 ADR measures, etc.) that can substitute for (or complement) protests and improve procurement outcomes.[7]

Acknowledging the significant costs of operating a protest system to govern the procurement process and encourage competition yields one of the key insights of this study: There exists an optimum rate (and type) of protests. In combination with a portfolio of other initiatives (audits, investigations, etc.), the optimum rate of protests offers the most efficient and effective way to ensure the integrity of the acquisition process, while guaranteeing the best possible procurement outcomes for our troops and taxpayers.[8]

While it is not easy to locate this optimum, the economics approach attempts to identify and evaluate policies that could move us closer to the optimum. One important implication is that a simple, often-stated objective of contracting officials, such as "reducing the rate of successful protests," is not always appropriate.[9] Two additional factors need to be considered. The first is to identify where the department is relative to the optimum. The second involves a careful consideration of how the department might choose to reduce and manage protests.[10]

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[7] For example, a comparison of protests and audits suggests that "protests are a more powerful oversight mechanism, but that they have more adverse side effects. Audits are apt to result in the review of more properly conducted procurements. But protests result in fedmail, buy-offs and overdeterrence. … [The] supervision of protest settlement reduces harm from buy-offs and fedmail. Similarly, the poor selection of cases by audit could be improved by making the auditor responsive to complaints by bidders. [I]t may be appropriate to use audits and protest simultaneously" (MMR, 1991, pp. 10–11). Audits, however, involve substantial investments in qualified workforce (e.g., the staffs of the Defense Contract Audit Agency, the Offices of Inspector General, or congressional oversight committees) because the auditors must be able to survey, detect, and resolve a pool of contracts that may be greater in scope than the number of cases protested.

[8] Roughly speaking, the optimum is when the incremental social costs (in terms of extra delays and cost overruns) of additional protests outweigh the social benefits of those protests (to deter corruption and promote competition, ensuring procurement process integrity).

[9] For example, a recent Congressional Research Service (CRS) report states, "This report contains options for Congress related to minimizing the number of protests" (Schwartz & Manuel, 2009, p. 1).

[10] Much of the protest literature suggests that limiting protests would threaten competition, thus ultimately undermining procurement outcomes. If this is the case, then restricting the rate of

> If the Department of Defense finds itself above the optimum, then extra opportunity costs and transaction costs associated with protests tend to overwhelm the procurement process—i.e., by increasing delays and contributing to cost overruns and performance gaps. This is reflected in a recent statement that "The delay of contract award … triggered by a GAO protest … has … prompted concerns about the potential impact of protests upon government agency operations, especially in the Department of Defense (DoD)."Schwartz & Manuel, 2009, p. 1).

If a procuring activity is above the optimum rate of protests, then reducing the rate of protests is an appropriate objective so the burden does not outweigh the benefits. This can be accomplished in two ways: by reducing the expected benefits of a protest to a "disappointed bidder" (including by creating alternative mechanisms to address protester's concerns) or by increasing the expected costs.[11]

In contrast, if the procuring activity is below the optimum rate, then the overall benefits of the protests outweigh the extra (opportunity and transaction) costs. In this range, while reducing the rate of protests might appear to have positive short-run impacts for the activity, it could be at the expense of greater long-term benefits, such as preserving the integrity of the public procurement system and encouraging future competition. Remarkably, this study reveals two important cases that demonstrate

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successful protests might reduce the direct costs of protests to the procuring agency, but it would raise new indirect costs from reduced competition. In contrast to the existing literature, this study suggests that the net effect on competition of limiting protests is an empirical question. This raises the possibility that carefully limiting certain kinds of protests could actually increase competition. Identifying and mitigating conditions that trigger protests could actually increase competition, or reduce risk premiums that may be implicitly charged by contractors to the government as part of bids or offers to hedge against protests.

[11] This is a critical distinction emphasized in this study. The representative bidder model developed in Section III offers an illustration. It highlights the key differences in front of a prospective bidder (or offeror) who is faced with policies that limit protests either by reducing the expected benefits of a protest or by increasing the expected costs. A related problem is when the agency does not resolve the protest in a way that is optimal for the particular procurement program at issue. For instance, if an agency needlessly consents to a stay of the procurement and then takes excessive corrective action by cancelling a competition in its entirety instead of making minor changes or brief re-evaluation of a contract award, the protester would receive inappropriate benefits from the protest. The government should have a strong interest in reducing such windfall benefits to potential protesters.

that even in this range, it is possible to reduce protests and improve long-term outcomes. The key is to carefully consider how the department reduces protests.[12]

This study follows the basic outline of strategic planning. The next section (Background) answers the question, where are we? Section III (An Economic Protest Framework and Change Candidates) answers the question, where do we want to go? Finally, Section IV (Summary and Policy Recommendations) answers the question, how do we get there?

Section II consists of two parts: a review of insights from the existing protest literature, and a brief review of the protest process along with alternative governance mechanisms. Woven throughout this section is a discussion of data and survey results. Section III consists of three parts: an economic framework (representative bidder model),[13] and two sets of change candidates suggested by the model to

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[12] In general, if the procuring agency finds itself below the optimum, more protests are warranted since added oversight contributes to the integrity of the procurement process and encourages competition. In fact, much of the existing legal and regulatory literature implicitly assumes procuring agencies are below the optimum. This makes it appear somewhat counterintuitive that reducing protests could actually increase competition since the literature focuses on how reducing protests creates the risk of reducing the participation of losing bidders. However, as discussed in Section II, the trick is to reduce protests in such a way that it encourages sufficient additional competition by reducing the burden on prospective winning bidders of defending their awards in order to more than offset the loss of participation of prospective losing bidders.

[13] A two-player game model is being developed by members of the NPS Protest Project team that allows for shared awards (split buys). Split-buy remedies are consistent with statutes restricting bundling or consolidation of government contracts, such as the Competition in Contracting Act, 10 U.S.C. § 2304; the Small Business Act, 15 U.S.C. § 631, et. seq.; and the Consolidation of Contract Requirements law, 10 U.S.C. § 2382. They are also consistent with defense industrial base statutes, such as 10 U.S.C.§§ 2501-2507. Split buys must be carefully structured if the goal is to reduce bid protests while simultaneously promoting competition and encouraging efficiency and operational effectiveness for our troops and taxpayers. The proposal is for the contract split to depend on the relative value of the contract offers, with the winner receiving a larger split (i.e., share of the procurement) the greater the difference between the highest and second highest valued contractor. If the second-best offer is close to the best offer, then the contract split would be close to 50:50. If structured correctly, such a split strategy has the potential to retain the benefits of competition by encouraging contractors to submit proposals that reflect what they view as the best government value. Contract shares could be adjusted over time to reward contract performance and cost savings from process and product innovation. Finally, split buys increase competition for follow-on contracts since they preserve multiple procurement sources. This approach to protests deserves more careful modeling and exploration.

reduce the risk of protests—factors that reduce the expected benefits to a losing bidder of a protest, and factors that raise the expected costs. Section IV summarizes those factors (or change candidates) and suggests approaches to improve the acquisition process and procurement outcomes with an application to the KC-X aerial refueling tanker competition. The study concludes with a list of policy recommendations and recommendations for future research.

II. Background and New Insights

Most of the legal and regulatory literature on bid protests focuses on the benefits of a protest system.[14] Much less is written about the costs.[15] This section takes a more balanced view.

Bid protest systems are designed as decentralized, vendor-driven governance mechanisms to improve public-sector contracting outcomes.[16] Because a significant fraction of public expenditures goes to acquiring goods and services,[17] the theory is that allowing vendors to challenge public procurements offers relatively inexpensive oversight of the procurement process, promoting integrity, transparency, and accountability and encouraging competition. A popular argument is that a protest system spurs competition by reducing entry barriers that arise from a perception of government biases, errors, and favoritism, thereby improving procurement outcomes. This argument appears in a recent report to Congress by the Government Accountability Office (GAO): "The availability of a strong bid protest mechanism promotes competition in the procurement system by providing contractors a

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[14] The opening quotation of the Introduction offers an excellent example. The primary concerns expressed in the literature are to ensure the integrity (probity) and equity of the public procurement process. The former "involve[s] two aspects: first, preventing actual corruption—such as bribery, or the award of contracts based on personal interest—and second, securing the appearance of probity … ensuring that suppliers and the general public have confidence in the procurement process" (Arrowsmith et al., 2000, p. 32). Equity refers to the equal treatment of providers to promote competition and ensure that vendors are not arbitrarily excluded from government business.

[15] Two important exceptions are Marshall, Meurer, and Richard (1991) and Metzger and Lyons (2007).

[16] Another goal of allowing protests, expressed by the World Trade Organization's (WTO) *Agreement on Government Procurement* and by various Memoranda of Understanding between the Department of Defense and foreign governments, concerns reciprocal access to each country's defense contracts in order to minimize discrimination against foreign suppliers in domestic government purchases. This goal is a legally binding obligation of the U.S. government that may not be circumvented. Yet another goal of the protest system is to fulfill constitutional rights guaranteed under the First Amendment's redress-of-grievances clause and the Fifth Amendment's due-process clause.

[17] "According to USAspending.gov, between FY2001 and FY2008, the value of contract actions signed by DoD increased 120%" (Arrowsmith et al., 2000, p.13).

measure of confidence that concerns regarding potentially unfair treatment may be addressed in a neutral forum" (Kepplinger, 2009b, p. 14).

In general, a protest can relate to either the conduct of a procurement prior to selecting a winner (i.e., in the acquisition strategy or the solicitation: Invitation for Bid [IFB], Request for Proposal [RFP], or Request for Quotation [RFQ]),[18] determining the competitive range, or selecting the winner. Pre-award protests typically argue that some aspect of the solicitation unfairly disadvantaged the protesting company. Post-award protests generally argue that a procurement activity or official acted improperly and that this prejudiced the losing protesting bidder or offeror.[19] Post-award protests are the primary focus of this study (Gordon, 2006, p. 2).

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[18] An agency generally develops a solicitation that identifies what the agency wants to buy, advertises the solicitation, identifies the method for evaluating offers, and sets a deadline for the submission of bids or proposals. The agency then evaluates the bids or proposals based on the criteria set forth in the solicitation and awards the contract to the winning firm (Schwartz & Manuel, 2009, p. 2). An IFB begins with an announcement of mandatory specifications. The award is then made to the vendor that satisfies the specifications and offers the lowest price in a sealed-bid competition. The RFP lists desirable specifications and assigns points to offers that contain those features. A winning bid is often determined by summing the points for technical merit and then choosing the proposal that offers the best value in terms of cost and performance/schedule. The scoring function assigns weights to cost and different quality attributes. Unlike an IFB, a proposal submitted by a firm is not necessarily its final offer. Often, the agency conducts written or oral negotiations with all responsible offerors within a competitive range determined by the Procurement Official (PO). (For the purposes of this paper, the term *Procurement Official* encompasses Contracting Officers, Senior Procurement Executives, and others with procurement authority). During this time, the PO gives offerors an opportunity to correct deficiencies and clarify ambiguities. Firms in the competitive range revise their offers and submit "Best and Final Offers." POs exercise substantial discretion in determining specifications and evaluation criteria. (This study will often use the terms *bid* and *offer* interchangeably.)

[19] The issue of prejudice is central once a protester convinces a forum that the agency acted improperly. Prejudice refers to the harm the protester suffered from the agency's improper action. If a substantial weight is placed on prejudice, then even if an agency acted improperly, a protest can still be denied if the improper actions did not prejudice the protesting vendor, i.e., had no impact on their chances to win the competition (Gordon, 2006, p. 11). This would be an example of a meritorious protest denied for lack of prejudice. By sustaining protests only if a protester was prejudiced (i.e., could have won the competition), the tribunal is able to ensure that agencies are not told to redo procurements based on mere technicalities. The alternative is for a review forum like the GAO to leave agencies complaining that protests are sustained on technicalities that would have had no bearing on the selection of a contractor. Whereas hearing protests from those who were not prejudiced might shine the light on parts of the procurement system that need improvement, doing so might also significantly increase transaction costs. In this case, procurement officials would be forced to practice a form of "defensive medicine," using up valuable resources to avoid even the hint of a protest. This also invites the possibility of prospective bidders acting strategically and using the

The literature generally focuses on two players: a disappointed bidder[20] and the government. In fact, the government can be broken into several distinct players, each of which might expect a challenge from a disappointed bidder: procurement officials (POs) and their department or activity, the quasi-judicial Government Accountability Office (GAO), and the Court of Federal Claims (COFC).

Other key stakeholders occasionally overlooked in the protest literature include other bidders (especially the "winning bidder," eager to defend the award), our troops (who ultimately stand to benefit from the procurement), and taxpayers (who foot the bill).[21] The aim of this study is to represent the best interests of the last two players: our troops and the taxpayers. The report investigates the protest process with the aim of identifying opportunities to enhance the efficiency and effectiveness of government procurements in order to obtain the greatest (troop) value for (taxpayer) money.[22]

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threat of a protest as a bargaining tool. These two concerns are discussed in more detail in Chapters II A and B . In contrast, audits as accountability measures are focused primarily on compliance and do not have an independent mechanism of measuring prejudice. While audits may reduce costs for a particular transaction, they can also increase costs because of this lack of focus on prejudice.

[20] Other terms besides *disappointed bidder* found in the literature include disappointed offeror, unsuccessful offeror, excluded offeror, and interested party. For the purposes of this study, these terms are used interchangeably and basically refer to a company that has standing, or is allowed to protest the solicitation or award of a contract. "Interested party … means an actual or prospective offeror whose direct economic interest would be affected by the award of a contract" (FAR, Subpart 33.101—Definitions).

[21] In an article entitled "Constructing a Bid Protest Process: Choices Every Procurement Challenge System Must Make," Daniel Gordon (2006) focuses on four principal parties: the disappointed offeror who is denied a contract award or the potential offeror who is excluded from competition, the acquiring agency, the public at large and their elected representatives, and an intervening offeror or successful awardee. Each has a different objective in resolving the protest. The unsuccessful offeror seeks a forum to air complaints, to learn as much information as possible about the denial or exclusion of their offer, and, ultimately, to obtain some type of meaningful relief. The acquiring agency seeks to resolve the protest in a way that minimizes the impact on the efficiency and effectiveness of the acquisition process. The public seeks a resolution that promotes the integrity, transparency, and accountability of the acquisition system. The successful awardee (or intervening offeror) seeks a resolution that supports the original award (Gordon, 2006, p. 4).

[22] "The federal procurement system was designed by Congress to leverage maximum public benefit from scarce taxpayer funds through three guiding principles: competition, integrity, and transparency.

This section consists of two parts: a review of insights from (and gaps in) the literature, and a brief description of the protest process. Woven throughout this section is a discussion of data, legal authorities, the protest process, the literature, and some survey results.[23]

A. A Review of Insights from the Literature

> Whereas the most common term, and the term used in this study, is *bid protest*, the United Nations Commission on International Trade Law (UNCITRAL) refers to *reviews*, while the World Trade Organization's (WTO) *Agreement on Government Procurement* uses the term *challenges* (see generally, Gordon, 2006). As stated in the U.N. Commission on International Trade Law, UNCITRAL Model Law on Procurement of Goods, Construction and Services, chap VI, Guide to Enactment, (1994 p.30) "A review process … helps to make [acquisition regulations] to an important degree self-policing and self-enforcing, since it provides an avenue for review to … contractors, who have a natural interest in monitoring compliance [of procurement law] by procuring entities" (UNCITRAL, 1994, p. 30).

A key feature of protests that differentiates them from other methods of policing government procurements (audits, investigations, etc.) is that they serve as a decentralized oversight mechanism. Disappointed bidders serve as "private attorneys general" in the sense that they direct the government to investigate certain procurements through their protests (see Marshall et al., 1991). This allows private-sector vendors to decide where the government spends its investigative and oversight resources. This is in sharp contrast to traditional, centralized mechanisms such as audits, inspectors general, or criminal prosecutions, in which government officials are the ones that decide which procurements to review.[24]

Bid protests play an important role in ensuring integrity in the federal procurement system while … enhancing transparency and accountability" (JAT, 2009, p. 1).

[23] Survey results were compiled by Benishek et al. (2011) and appear in a companion report, *Better Acquisition Management through Alternative Dispute Resolution (ADR) and Other Best Practices for Preventing and Resolving Bid Protests,* published by the Naval Postgraduate School Acquisition Research Program as part of this study effort on the topic of bid protests.

[24] In terms of reducing fraud (corruption) in the solicitation or selection process, whistleblower reports to the Inspector General or the Justice Department are another viable de-centralized substitute for contractor protests. Similar to *qui tam* actions that arise under the False Claims Act, 31 U.S.C.

Protest systems serve multiple purposes. The federal government's protest process mostly focuses on deterring and correcting fraud (intentional violations of procurement laws and regulations) and errors (inadvertent violations of procurement laws and regulations) and on encouraging competition.[25]

> Fundamentally, bid protest systems, like audit systems, serve a procurement oversight function. They provide a means of monitoring the activities of government procurement officials, enforcing compliance with procurement laws and regulations, and correcting incidents of improper government action. … [E]nforcing compliance with procurement laws implicates not just high standards of integrity, but also … the maximization of competition. (Troff, 2005, pp. 118, 120)

Bid protests are one of several different mechanisms used by federal, state, and local governments and other countries around the world to increase competition and reduce fraud, waste, and abuse in government contracting.

> Bid protest procedures are now well-established as a key feature of every major national procurement regime as well as the international trade agreements that address government procurement—such as the WTO Agreement on Government Procurement, the North American Free Trade Agreement (NAFTA), and the European Union Procurement Directives. (Troff, 2005, p. 129)

Protest systems are designed to enhance the accountability of procurement officials and government agencies and to improve bidder participation. By allowing protests, the government can increase competition if this reduces barriers to entry created by a perception of favoritism or lack of integrity and transparency in the procurement process. Not only does a protest system serve as a deterrent to

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section 3729, potential whistleblowers might be induced to step forward if they were offered the same 15–30% of funds recovered/saved in the procurement as may be recovered by private *qui tam* realtors. The economics approach promoted in this study suggests identifying and evaluating alternative governance mechanisms that achieve similar aims to a protest system at a lower cost.

[25] "Bid protest systems … are characterized by their speed and efficiency, the meaningfulness and independence of their review processes, and their ability to provide meaningful relief" (Troff, 2005, p. 116).

improper conduct—improving the integrity and fairness of the procurement process—but it can also help clarify and shape procurement law.[26]

However, there is a dark side. Achieving these goals increases opportunity costs and transaction costs and can lead to lengthy and costly procurements.[27]

A narrow goal for the Defense Department is to minimize transaction costs in order to promptly and efficiently complete an acquisition. This argues for limiting delays and disruptions from protests by reducing the expected benefits of a protest to a disappointed bidder, or by increasing the expected costs.

Proposals to accomplish this have included: narrowing standing (eligibility), setting stricter time limits for filing protests (and for deciding them), encouraging alternative dispute resolution (ADR), raising filing fees, setting fines for frivolous protests, instituting new rules such as restricting the ability to institute frequent or repeated protests, or establishing the loser pays method (for cases in which a protest has merit but is ultimately denied because the dispute involves a mere technicality and there is lack of prejudice).[28] Although a fear generally expressed in

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[26] Of course, taxpayers' representatives in Congress often have zero tolerance in public procurement for certain violations, such as conflicts of interest, kickbacks, misrepresentation, and procurement integrity violations. For instance, under the False Claims Act, delivery of quality products or services is not an allowable defense. (see *Longhi ex rel. United States v. Lithium Power*, 575 F.3rd 459 (5th Cir. 2009). However, it may be appropriate to consider whether all violations currently redressed through the protest process for all types of disappointed bidders should continue to be redressed through remedies that have substantial cost and delay impacts on the acquisition system

[27] "A number of high-profile government acquisitions have experienced extensive delays as a result of GAO bid protest decisions. For example, on Jun 18, 2008, GAO sustained Boeing's protest of the Air Force's award of a contract to Northrop Grumman [for the KC-X tanker aircraft]. … Identifying which protests tend to experience the longest delays—and working to minimize such delays—could help the government save hundreds of millions of dollars and receive the goods and services it needs when it needs them" (Schwartz & Manuel, 2009).

[28] Note that restricting the number of protests is unconstitutional on First and Fifth Amendment grounds. The frequently stated recommendation to limit the number of non-frivolous protests would violate the First Amendment right to petition the government for the redress of grievances and the Fifth Amendment right to due process. As noted in the companion report of Benishek et al. (2011, pp. 110), Federal courts disfavor broad limitations on access to the legal process. For example, the Supreme Court held in *Bill Johnson's Restaurants, Inc. v. National Labor Relations Board* (461 U.S.

the legal and regulatory literature is that limiting protests will inhibit competition and result in higher costs,[29] those costs could be more than offset by reductions in delays and by disruptions from fewer protests.

In reviewing the literature, there appear to be two underappreciated risks (costs) associated with the operation of the current protest system. One is the strategic use of protests (e.g., stays, injunctions, or delays) by firms to obtain competitive advantage (or to recoup bid proposal costs).[30] The other is the risk of

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731 (1983)), that a Federal agency cannot halt lawsuits brought even for improper motives unless those lawsuits are based on "intentional falsehoods or on knowingly frivolous claims," or otherwise lack a reasonable basis. In another case, *California Motor Transport Co. v. Trucking Unlimited* (404 U.S. 508 (1972)), the Supreme Court held that Federal antitrust laws may penalize businesses bringing lawsuits and petitions to Federal agencies only if such petitions and lawsuits are "a mere sham to cover what is actually nothing more than an attempt to interfere directly with a business relationship of a competitor." Federal appellate courts also identified two limited ways which can render a legal action frivolous: "First, a legal action is considered 'frivolous as filed' when a plaintiff or appellant grounds its case on arguments or issues 'that are beyond the reasonable contemplation of fair-minded people, and no basis for [the party's position] in law or fact can be or is even arguably shown.' . . . Second, a legal action is considered 'frivolous as argued' when a plaintiff or appellant has not dealt fairly with the court, has significantly misrepresented the law or facts, or has abused the judicial process by repeatedly litigating the same issue in the same court." (GAO, B-401197, 2009, 11). However, options include agency policies requiring mandatory consideration of stay overrides, requiring vigorous objections, setting stricter time limits for deciding or resolving protests, mandating alternative dispute resolution (ADR) as the default resolution mechanism, or other approaches such as replicating sanctions for frivolous protests available at the Court of Federal Claims in GAO protests, or instituting rules such as the posting of bonds for the expenses of delays resulting from stays of protests that are ultimately not sustained. In addition, the standard of review at the GAO may be adjusted from the more relaxed and subjective "reasonableness" standard to the "arbitrary, capricious, abuse of discretion, or otherwise not in accordance with law" standard used by the COFC under the Administrative Procedures Act (*Choice of Forum for Federal Government Contracts Bid Protests,* at 298 (2009). Further, agencies can be encouraged not to allow post-award bid protests challenging the evaluation and the conduct of source selection to result as a matter of course in pre-award corrective actions, such as total cancellation of solicitation and full re-competition.

[29] "Attempts to disincentivize protests … may have, on balance, the unintended consequence of harming the federal procurement system by discouraging participation in federal contracting and, in turn, limiting competition" (Kepplinger, 2009, p. 12).

[30] Another strategic use of protests is so-called "fishing expeditions." These are attempts to obtain valuable information about competitors, selection criteria, etc., to use in current or future competitions. Although issuance of protective orders are meant to prevent firms from accessing information from an agency or competitor that might be used to unfair advantage, it is plausible that information gleaned in the protest process could turn out to have significant strategic value. As discussed throughout the companion report, Benishek et al. (2011), better quality debriefings can play a significant role in reducing or mitigating protests.

over-deterrence, or a proliferation of defensive actions by procurement officials (POs) to avoid protests.[31]

1. The Strategic Use of Protests by Firms

Prospective bidders can use the (implicit or explicit) threat of filing a protest as a strategic bargaining tool in negotiations.[32] This is a uniquely credible threat due to the significant delays that arise in disputed procurements.[33] In fact, filing a protest with the Government Accountability Office (GAO)—the most popular forum—guarantees an automatic stay of up to 100 days.[34]

In order to avoid the threat of costly delays, procurement officials are understandably tempted to engage in preemptive settlements. Though a large number of disputes in our legal system are settled rather than litigated (Marshall et

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[31] A risk is that the government's focus (i.e., the pendulum) would shift from the execution of contracts to an over-emphasis on compliance, potentially harming acquisition outcomes. Another risk, addressed in detail in the companion report, is that agencies, in effect, may be tacitly condoning filing and litigation of bid protests in order to purchase a seal of approval or obtain authoritative direction from the GAO (see Benishek et al., 2011, p. 69).

[32] The concern over frivolous protests may also be relevant for tactical reasons as a protestor strategy to reveal key information for current or future competitions. The risk of abuse could motivate raising filing fees, punishing vendors that file frivolous protests, or compelling unsuccessful protestors to reimburse the government (and awardee) for the cost of defending against the protests. The danger is that disappointed bidders with legitimate issues might be deterred, fearing the contracting agency might retaliate in future competitions. These concerns could be examined by setting up Statistical Hypothesis tests and exploring Type I and Type II errors.

[33] In the companion report presenting a recent NPS survey of acquisition officials, 70% (14/20 participants) responded that strategic behavior by disappointed offerors was at least a moderate aspect that precluded the effective avoidance or resolution of bid protests (see Benishek et al., 2011, pp.71–72). The GAO is aware of the risk of delays: "Despite the variability in protest filings from one year to the next, our Office minimizes the delay and disruption associated with protest filings by resolving protests as expeditiously as practicable. In fact, during the last 5 years, we have consistently closed more than half of all DOD protests within 30 days of when they were filed" (Kepplinger, 2009b, p. 10).

[34] "The filing of a GAO protest … triggers an automatic stay of contract award or performance that can interrupt agencies' procurement initiatives for as long as the protest is pending" (Schwartz & Manuel, 2009, p. 3). Note that the alternative bid protest forum, the Court of Federal Claims (CFC), has much stricter requirements for a disappointed bidder to obtain an injunction.

al., 1991),[35] so-called *Fed-mail* and *Buy-off* settlements made to avoid protests can be both subtle and costly.[36] They include anything from subtly restructuring solicitations in order to discriminate for or against certain vendors, to guaranteeing future work or subcontracts, to the payment of "consulting" fees or other forms of cash payments.

> Bid protest disputes often give rise to significant operational delays. Sometimes, rather than litigate the bid protest, and then correct the flaws in its procurement, an activity will try to "buy off" a bid protester with a monetary settlement. This practice is known as "Fedmail".[37] (Office of the General Counsel, 2004, p. 4-83)

Roughly speaking, it is useful to think of a Fed-mail settlement as a response by procurement officials to threats by a prospective bidder to impose a protest-driven delay of an acquisition—primarily based on technicalities that violate the letter of the law. A Buy-off settlement is similar except that it is initiated by the procurement official to avoid the penalty of a protest-driven delay due to an (intentional or unintentional) error or omission in the procurement process likely to violate the spirit of the law.[38]

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[35] A "survey by the American Bar Association (1989) found that half of all federal agencies had settled protests to "simply move forward with the procurement. … POs [procurement officials] often settle by enhancing the terms of other contracts that the protester currently has with the procuring agency" (Marshall et al., 1994, p. 300).

[36] Procurement officials can subvert the protest system by paying protestors through Fed-mail or Buy-offs to abandon challenges to procurement decisions. These could include subcontracts, future contracts, split buys, cash settlements, etc.

[37] In *ADP Bid Protests: Better Disclosure and Accountability of Settlements Needed* (Government Accountability Office [GAO], 1990, p. 31), the GAO indicated that it would question the propriety of Fed-mail payments, if and when it came across them.

[38] Such cash or in-kind settlements produce a negative externality for taxpayers that can defeat the positive private–attorney-general role of protesters. "If the agency problem is severe, the threat of protest … induces the [procurement official] (or Awardee) to offer a cash or in-kind settlement to protesters. We refer to [this] as 'buy-off' settlements" (Marshall et al., 1991, p. 9). Traditionally, Fed-mail referred to cash settlements in bid protest cases—a practice Congress sought to discourage by requiring public reporting of delay-avoiding cash settlements for protests of information technology when the GSA Board of Contract Appeals had jurisdiction over such protests. This problem was evaluated by the GAO in its March 1990 report, *ADP Bid Protests: Better Disclosure and Accountability of Settlements Needed*," GAO/GGD-90-13 (March 1990). As discussed in the Senate

Ironically, the many ways in which the procurement process can be corrupted—which bid protest systems are meant to deter and correct—can reappear in well-intentioned, but misguided, Fed-mail and Buy-off settlements by agencies trying to keep an acquisition on track.

> At the contract formation phase … evaluation criteria in the request for proposal or tender documents could be drafted to favor a particular supplier or service provider or … to emphasize weaknesses of a particular competitor. Later … the evaluation criteria could be misapplied or otherwise further defined or amended after proposal or tender receipt. ... [A]dvance information could be provided to a particular favored supplier. Other techniques [might include] failing to solicit proposals or tenders from the competitors of a favored supplier, wrongfully restricting the tender pool, soliciting offerors known to be inferior to a favored supplier, … or rejecting legitimate proposals. (Troff, 2005, p. 119, footnote 22)

Report 103-258 on the Federal Acquisition Streamlining Act of 1994, adopted by the Senate Governmental Affairs Committee on August 30, 1994:

> In 1990, GAO addressed the settlement process at the Board. This review was in response to reports that disappointed offerors were filing protests of contract awards, and to avoid procurement delays, agencies would pay protesters to drop their claims. It also followed GAO's study of the Census Bureau's handling of a protests of a multimillion dollars procurement of ADP for then-upcoming census in which $1.1 million was paid by the agency to settle the claims without a review of the merits.
>
> GAO found that nearly half the protests it sampled were settled before a decision was issued by the Board. Slightly more than half of that number involved cases where the terms of the settlement were disclosed. Although GAO's sample of cases did not show a high incidence of money changing hands, GAO noted that such settlements should be an issue of concern. Indeed, GAO concluded: [I]f an agency offers monetary settlements solely to avoid operational delays resulting from CICA's suspension procedures, we believe there is no basis for the settlement. Further, we would question the appropriateness of monetary settlements where the agency (1) thought the protest had no merit or (2) chose not to correct procurement flaws that could be corrected, but settled with money because it would take less time. *** Because not all settlements are disclosed, the fact that our review did not show a high incidence of Fedmail is not conclusive evidence that there is no problem. *** GAO recommended that Congress act legislatively to require that settlement terms be disclosed to the Board, and section 1436 would address the issue.

FASA Section 1436, however, effectively disappeared with the demise of the bid protest jurisdiction of the General Services Administration Board of Contract Appeals (GSBCA). No equivalent transparency requirement exists today in agency, GAO, or COFC protests. Congress should consider rectifying this transparency gap.

There is a serious risk that procurement officials might succumb to strategic threats of an automatic stay initiated by prospective bidders/offerors attempting to improve their bargaining position.

> Companies may 'game' the process, using the stay to exact concessions from agencies and to disrupt the … business opportunities of rivals who bested them in competition. For example, an incumbent contractor that loses the competition … may file a protest simply to stay performance of the new contract and extend its current contract for the duration of the GAO protest.
>
> As long as the marginal profit earned by extending the legacy contract exceeds the cost of the protest … the temptation to engage in strategic behavior is always present. Alternatively, a failed bidder may stay the award through a GAO protest and then seek settlement with the awardee [or agency] by getting a portion of the contract as a subcontractor. (Metzger & Lyons, 2007, p. 1240)

As emphasized by Marshall, Meurer, and Richard (1991), protest forums "should not grant standing to firms whose sole potential purpose is to use the costs and delays inherent in the … [protest] process for [private] gain"[39] (p. 19).

The cost of preventing or deterring inappropriate settlements is an additional transaction cost not clearly understood or appreciated in the current operation of the protest process. A recommendation of this study is that agencies and departments evaluate the risk that protest systems might inadvertently motivate inappropriate settlements in order to protect procurement actions.[40]

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[39] Exploring the additional possibility of settlements occurring between firms, Marshall et al. (1994) conclude, "An inter-firm settlement … is essentially equivalent … to a bid-rigging agreement. … [A] payment by one firm to another in exchange for a decision not to participate in a procurement would certainly be subject to antitrust action" (p. 308). They go on to argue, "Inter-firm settlements of protests should be banned. Such settlements produce outcomes that are identical to those that would occur with explicit collusion" (p. 314). In contrast, one can imagine cases between an agency and a contractor in which the social benefits of a well-crafted (and legal) settlement (to avoid litigation expenses, delays, extra transaction and opportunity costs, etc.) could exceed the social costs. Regardless, this study recommends any significant settlements be subject to review.

[40] Another recommendation is to extend section 1436 of the Federal Acquisition Streamlining Act of 1994 to protests at the GAO, the Court of Federal Claims, and other agencies.

Especially troublesome in this context is a protest measure developed and routinely reported by the GAO called the *effectiveness rate* (for example, see Kepplinger, 2008). This measure captures "the percentage of protesters obtaining relief—either through a protest being sustained, or through *voluntary action[emphasis added]* taken by the agency" (Kepplinger, 2008). Unfortunately, in the latter case, so-called "voluntary" actions could easily consist of unproductive Fed-mail or Buy-off settlements.[41] If so, this would not only undermine but also directly contradict a recent conclusion drawn by the Congressional Research Service (CRS) that "the effectiveness rate may be a good way to measure the number of protests that have actual or potential merit" (Schwartz & Manuel, 2009, p. 5).

The risk of Fed-mail and Buy-off settlements warrants a serious rethinking by the GAO of its protest effectiveness rate measure. It also cautions departments, agencies, and Congress against implementing any analysis or recommendations that utilize this measure.

Another serious risk is that agencies may tacitly condone bid protests for various improper reasons, such as to obtain direction or a "seal of approval" from the GAO. Trends such as increases in corrective actions, highlighted by the Congressional Research Service (CRS), [42] and underutilization of legal tools

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[41] Any increase in the effectiveness rate could indicate that government agencies are over-generously engaged in Fed-Mail or Buy-off settlements to keep procurements on schedule and minimize delays, or that they are giving voluntary aid to protestors to avoid negative publicity.

[42] When agencies over-protect or under-defend bid protests, each practice undermines the CRS observation: "many analysts consider the increasing willingness of agencies to voluntarily take corrective action as one of the most significant trends in bid protests. Such voluntary action by an agency *could indicate that the agency believes that a given protest has merit*" [emphasis added] (Schwartz & Manuel, 2009, p. 5). This increase may suggest that agencies are increasingly making wrong procurement decisions which the protests are forced to correct. However, clearly, if increases in "voluntary actions" include Fed-mail and Buy-off settlements, this hardly guarantees that those protests have merit. On the other hand, as described by Spriggs and Kidalov, agencies may be engaging in risky protest litigation and incurring unnecessary legal expenses for the purpose of protecting agency reputations and anti-competitive practices. As a result, agencies are litigating protests until the last possible moment before the GAO issues a formal decision even where "a reasonable agency inquiry into the protest would show facts disclosing the absence of a defensible

designed to reduce disruptions in the procurement process as highlighted in the companion report to this study (Benishek, Sheinman, Kidalov, & Angelis, 2011), suggest that the buying agencies may be relying on the GAO bid protest process as a substitute for more careful acquisition planning and source selection.

2. It Pays to Give Procurement Officials the Benefit of the Doubt

As mentioned earlier, the GAO (and most procuring agencies) grants an automatic stay upon the timely filing of a protest. In a very real sense, this automatic shutdown of a government procurement action is equivalent to assuming that procurement officials are guilty until proven innocent.[43] The data suggests that a powerful argument can be made for giving procurement officials the benefit of the doubt, or for assuming that they are innocent until proven guilty.

Figure 1 displays data on protest outcomes for the USAF collected from the GAO's Bid Protest Docket, as reported on October 3, 2008. Perhaps the most striking feature is that well over two thirds of protests in this sample were found to be without merit or were not sustained. Given the goal of promptly and efficiently completing an acquisition, this data strongly argues against forcing agencies to incur potentially costly delays as a result of the suspension of a procurement (due to an automatic stay) while a protest is resolved.

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legal position" and where agencies are forced to incur document production expenses and pay the protester's legal fees (Spriggs & Kidalov, 2003).

[43] An important exception is the Court of Federal Claims (COFC): "In contrast to the automatic stay at the GAO, if a protester files its protest at the COFC, it must meet the standards for a preliminary injunction to obtain a stay. Thus, the protester must demonstrate that it is likely to succeed in its protest, it will suffer irreparable harm unless an injunction is granted, the agency will not suffer a greater harm if the injunction is granted, and the public interest favors an injunction" (Schaengold et al., 2009, p. 20). Although forcing disappointed bidders to seek a preliminary injunction to stop a procurement is more costly (and risky) to the protester, it is recommended, based on the extremely low rate of successful protests (and the substantially higher rate of protests that are dismissed, denied, etc.), that instead of an automatic stay, agencies and the GAO adopt the COFC standard that procurement officials are innocent until proven guilty.

Undoubtedly the automatic-stay procedure benefits some contractors by preserving the opportunity for resolution of a meritorious protest. But it is far from clear … [whether] these benefits outweigh the delays, disruption, and increased costs [imposed] upon legitimate contract awards, particularly in light of the fact GAO denies two thirds of filed protests. (Metzger & Lyons, 2007, p. 1240)

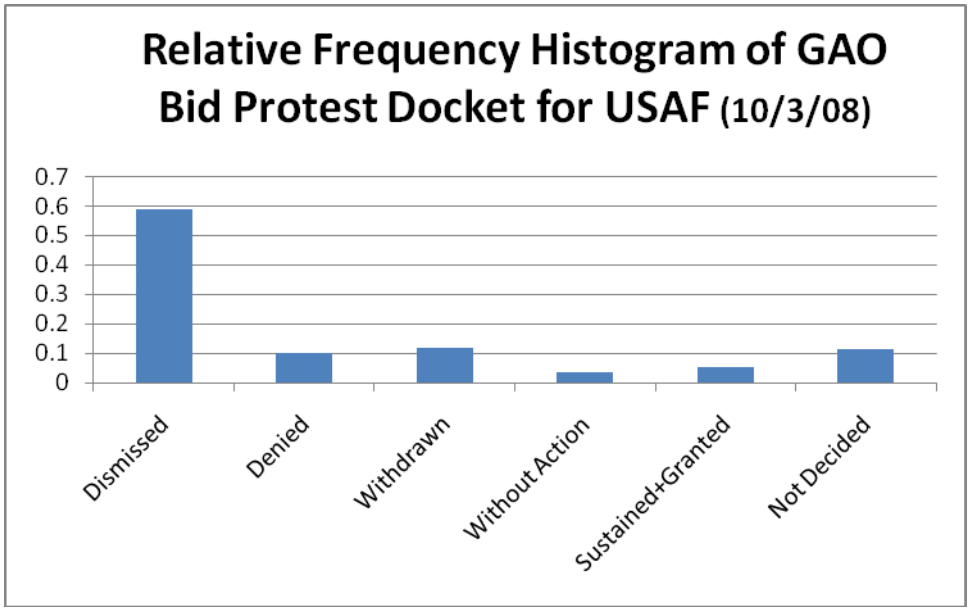

Figure 1. Rate of Unsuccessful Protests—Almost 70% Dismissed or Denied

The data suggests that it may be appropriate (a) to overturn the implicit assumption that procurement officials (PO) are guilty until proven innocent that currently underpins the GAO's automatic stay of disputed procurements, and (b) to replace it with the assumption (similar to that of the Court of Federal Claims) that POs are innocent until proven guilty. Under today's binding GAO rules, and restrictive regulations and statutes, this argues for departments and agencies to consider restricting stays (or injunctions) through more frequent use of (stay

override) arguments[44] such as "urgent and compelling circumstances" or "in the interest of the United States"[45] (see FAR, subpart 33.103; FAR, subpart 33.104).

Although rarely addressed in the literature, this argument is nicely captured in the following quotations from Metzger and Lyons (2007, p. 1238):[46]

> With CICA's automatic-stay provision, Congress attempted to provide effective review of bid challenges, and in the process to encourage competition in contracting. … By staying the contract pending the protest, CICA implicitly assumes that the agency is at fault. …
>
> A losing bidder can enjoin a competitor's contract award for up to one hundred days simply by mailing a statement to the Comptroller General [GAO] outlining the basis of its protest. … This assumption of agency fault and … [the] delay prompted by a GAO stay is particularly puzzling given the GAO typically sustains only one third of protests decided on the merits. This means that in approximately two thirds of the decided protests the GAO stay delays legitimate procurement awards, forcing government agencies to extend less effective legacy contracts, pursue expensive temporary stopgap measures, or delay the functions that prompted the procurement. (pp. 1238, 1239)

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[44] When asked how often their agency engages in defensive/preventive strategies in order to minimize negative impacts of bid protests on the acquisition process, over 70% of survey respondents indicated that they never or only in exceptional cases seek overrides of mandatory stays (Benishek et al., 2011, pp. 67-68).

[45] Alternatively, "By adopting a more rigorous threshold review of … filed protest[s], the GAO [could] limit … procurement actions … subject to a stay. A rapid dismissal of 'nuisance' protests [would avoid] the disruptive and costly effects of an unwarranted stay. … [Although in the end,] the Comptroller General [where it finds an agency's decision unreasonable] often proceeds directly to invalidate an award, or require re-competition. ... The more nuanced COFC approach recognizes that the public interest is not always served by delaying a procurement to correct minor defects in a solicitation or errors in the conduct of a competition" (Metzger & Lyons, 2007, p.1268). Indeed, the GAO Bid Protest Regulations presently lack even the standard for determining whether a protest is legally frivolous or meritless.

[46] A more balanced system exists in the U.S. Court of Federal Claims (COFC), as described in the companion report, *Better Acquisition Management.* At the COFC, a stay of procurement is discretionary and is not granted if the government can establish that "(1) the protester is not likely to succeed on the merits of the allegations that the agency action was illegal, arbitrary, capricious, or abuse of discretion; (2) the protester will not suffer irreparable injury without injunctive relief; (3) the balance of hardships favors the government; and (4) an injunction would be contrary to the public interest, including considerations of national defense or national security" (Benishek et al., 2011, p. 32). Further, under COFC Rules 65 and 65.1, a protester must post a bond or other security sufficient to compensate the government if the stay was ultimately wrongful.

3. Defensive Medicine: The Risk of Over-Deterrence

Besides the strategic use of protests by firms to extract a competitive advantage, another significant cost associated with the current protest system is that acquisition officials risk getting caught practicing "defensive medicine." Such over-deterrence is manifested in a proliferation of costly (overlapping) reviews instituted to ensure that the design and conduct of procurement actions are protest proof. This can also be observed in the behavior of procurement officials as they feel increasingly paralyzed[47] and avoid any actions that might risk triggering a protest.[48]

A danger is that acquisition officials will become more concerned with input-focused compliance rather than output-focused execution, increasing transaction costs at the expense of procurement outcomes. Arrowsmith et. al. (2000) warns,

> when the procurement system is primarily rule-based, the focus in assessing the performance of procurement officers tends to be on compliance with the rules rather than with the quality of results achieved. … This can lead to a situation where even within the area of discretion, procurement officers may engage in unduly cautious behavior in order to avoid possible accusations of non-compliance. …
>
> [I]ndirect adverse consequences will arise as a result of a fear of [protests] by disappointed contractors. This might have the effect of inducing undue deference to the interests of contractors to the detriment of the public interest. For example, public authorities may become ready to order a re-solicitation at

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[47] "Each agency should preclude management layering and placing nonessential reporting procedures and paperwork requirements on program managers and contractors" (Office of Management and Budget [OMB], 1976, section 8).

[48] This is related to a risk recently expressed about the latest Weapon System Acquisition Reform Act (WSARA) of 2009:

> complaints … often heard … [are] that the WASRA duplicates existing regulations, adds fresh layers of bureaucracy and piles of new reporting mandates that could have paralyzing effects on a system that already is sluggish and unresponsive. … A combination of confusion and fear of making mistakes is fueling paranoia and creating an environment where programs will see costs rise and schedules delayed. … The frustration Congress feels translates into more reports, and more oversight. (Erwin, 2010)

An anonymous official recently commented, "Every agency has over 200 years of governance that tells us what we cannot do" (personal communication).

> the slightest complaint, despite the delay … rather than risk legal action with its potential for even greater disruption. (pp. 76, 759)

There is a delicate balance between the desire to eliminate any hint of protest liability in order to ensure absolute compliance to avoid protests, and the risk of growing transaction and opportunity costs faced by the department to move an acquisition forward.[49] In such circumstances, agencies should have no reluctance to defend their decisions or to use ADR and other expedited resolution tools wherever appropriate.

Another serious and related concern is the risk that a procurement official (PO) might deny one company an award in order to avoid incurring protest costs from its more litigious opponents. Structuring this as a two-player prisoner's dilemma game suggests that any hint of favoritism on the part of a PO would likely increase every bidder's propensity to protest.

The logic is straightforward. If one firm is more inclined to protest and the other is not, then the protesting firm increases its probability of winning at the expense of the other firm. Since the game is symmetric, both firms will eventually be more inclined to protest or risk being shut out of future competitions.

The result is similar to an arms race competition in the sense that, everyone is more likely to protest and yet no one is any more secure in obtaining a contract. This might help explain a recent observation by current Under Secretary of Defense for Acquisition, Technology, & Logistics Ashton Carter: "I am and the entire department is concerned about protests becoming common or routine" (as cited in

[49] The risk is that the protest system "tail" begins to wag the procurement process "dog to the detriment of procurement outcomes. This risk is amplified if officials are held accountable for current delays from protests, but benefit only indirectly from successful future outcomes—i.e. final fielding of future programs or capabilities. The latter issue relates to the principal-agent problem discussed later, where alternative ways of achieving the procurement objectives of equity, integrity, and efficiency are also explored.

Shalal-Esa, 2009). A companion explanation emerges when placed in the shoes of a disappointed bidder, and asked to look forward and reason back.

4. Placing Ourselves in the Shoes of a Disappointed Bidder

In order to understand a firm's protest strategy, the economics approach suggests looking forward and reasoning back. This involves three steps that result in two key recommendations.

(1) The first step is to place ourselves in the shoes of a disappointed bidder and ask, what are their goals and objectives? The answer is likely profit maximization (i.e., a return to shareholders), including the immediate contract and any follow-on business. Much like playing the lottery, a disappointed bidder who maximizes profits will calculate the expected value of winning the protest. The expected benefit is the probability of winning the protest (i.e., the likelihood a protest is sustained) multiplied by the payoff (i.e., the reward). A simplified version of a disappointed bidder's decision problem is illustrated in Figure 2. To determine whether to file a protest, the disappointed bidder looks forward and reasons back. The expected benefit of filing a protest is roughly the probability that the GAO will sustain the protest (P_S) multiplied by the payoff.

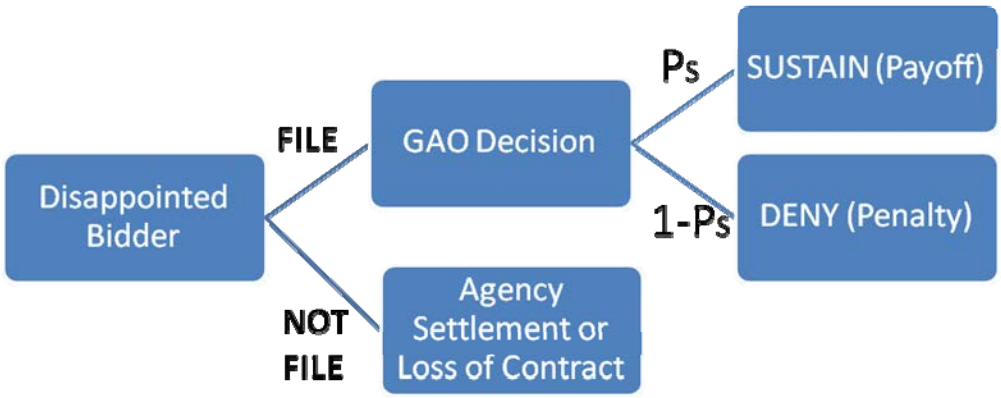

Figure 2. Disappointed Bidder Decision Tree

(2) The second step is to place ourselves in the shoes of a disappointed bidder and ask, what constrains their behavior? Unlike playing the lottery for fun, economists assume that CEOs are rational "players" constrained by shareholders/owners and are likely to engage in a benefit-cost-type analysis to determine whether to play (i.e., to file a protest). In making its protest decision, a company will weigh the discounted present value (or option value) of the expected benefits of playing a protest lottery against the costs. The higher the cost of playing, the less likely a firm is to file a protest. In this case, "buying a ticket" to play (i.e., filing a protest) can include filing fees, hiring lawyers and subject-matter experts, paying penalties, and the significant opportunity costs of diverting the company's focus and resources. The expected costs of filing a protest are roughly the probability that the GAO will deny the protest ($1-P_S$) multiplied by any penalties (including opportunity costs).[50]

(3) The third and final step is to place ourselves in the shoes of officials representing the procurement activity. This involves asking how we can align the interests of a contractor with the defense activity's interests to reduce protests. The first opportunity is to lower the expected benefits of a protest (i.e., lower the probability of success and/or the payoff). The second opportunity is to increase the expected costs.

The economics approach automatically generates two recommendations to reduce protests: lower the expected benefits of a protest or increase the expected costs.

Options to increase the expected costs of a protest, include: (i) filing fees could be raised to reflect the government's (agency and GAO) complete costs to administer a protest; (ii) firms could be required to post a bond to compensate for delays in the event that the protest is denied; or (iii) penalties might be assessed in

[50] The detailed model can be found in Section III of this study.

the event of protests which are either clearly strategic and not in the public interest, or largely frivolous protests.

To lower expected benefits, the first step is to identify feasible ways to reduce the probability of successful protests. For example, fraud and errors could be reduced by (i) increasing training and experience, (ii) ensuring the transparency of the assessment criteria, (iii) ensuring the transparency and accountability of the evaluation and selection process, and (iii) making companies aware of the low probability of awards being overturned

The second step is to identify feasible ways to reduce the payoff from a successful protest. Examples of how this could be done include (i) reducing the award (unbundling the contract, etc.), and (ii) keeping records of protests by firms and using this information in future competitions (i.e., a reputation for delaying projects through frivolous protests), This latter option, however, could be unconstitutional, against the First and Fifth Amendments, unless targeted protests are truly frivolous as defined by Federal judicial precedents.

Another interesting insight generated by the economics approach is that there may be no such thing as a frivolous protest; only strategic protests. A rational, calculating disappointed bidder will only file a protest if the expected benefits outweigh the expected costs. Therefore, in reality, so-called "frivolous" lawsuits likely reflect the strategic use of protests by firms. A major challenge for a procuring activity is to reap the benefits of protests while limiting the unintended disruptions/consequences caused by the protest process.[51]

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[51] Because the Defense Department is grappling with this challenge, it must avoid retaliation in strict compliance with settled constitutional principles of freedom to petition the government for redress of grievances and due process under the First and Fifth Amendments. It is critical to make distinctions between legally frivolous protests that can be sanctioned under law and protests that are unmeritorious, marginally meritorious, or insufficiently meritorious for injunctive relief. The GAO considers a protest to be "clearly meritorious" when "a reasonable agency inquiry into the protester's allegations would show facts disclosing the absence of a defensible legal position" GAO, *The Real Estate Center-Costs*, B-274081.7 (1998). However, as noted in the companion Benishek et al.

B. The Optimum Rate of Protests

The effort to balance the benefits of protests against the potentially significant (opportunity and transaction) costs suggests that there is an optimum rate of protests. Although it is unrealistic to think that we can precisely pin down this optimum, it is useful to discuss its characteristics.

For example, suppose the Department of Defense finds itself above the optimum. In this case, reducing the rate of protests is warranted because benefits to all parties (buyers, sellers, and taxpayers) outweigh the costs. However, if the Defense Department happens to be at or below the optimum rate, then any direct (short-run) benefits from reducing protests could be more than offset by indirect

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(2011, pp. 111–112) report, the GAO presently does not make a determination of whether a protest is legally frivolous, but the COFC does:

> Under Rule 11 of the Rules of the Court of Federal Claims, a protester can be sanctioned only if the protest: (1) is being presented for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation; (2) the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law; (3) the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery; and (4) the denials of factual contentions are warranted on the evidence or, if specifically so identified, are reasonably based on belief or a lack of information.

Under Rule 11,

> a sanction imposed under this rule must be limited to what suffices to deter repetition of the conduct or comparable conduct by others similarly situated. The sanction may include nonmonetary directives; an order to pay a penalty into court; or, if imposed on motion and warranted for effective deterrence, an order directing payment to the movant of part or all of the reasonable attorney's fees and other expenses directly resulting from the violation. (Rules of the Court of Federal Claims, Rule 11 as amended through Jan. 11, 2010). CITATION)

The COFC does not sanction protests that do not meet these requirements. As noted in the *Better Acquisition Management* report "Necessarily, a protestor would have some right to due process in order to "avoid punishing a company for filing a good-faith but unmeritorious protest." (GAO, B-401197, 2009, 13). This process may actually make the overall protest process longer, which could have potential negative impacts on the acquisition system. However, bringing the GAO Bid Protest Regulations to parity with COFC concerning sanctions for truly frivolous protests could provide a deterrent and, more importantly, address the perception that GAO may be welcoming frivolous protests." However, the COFC Rules 65 and 65.1 require protesters in unmeritorious protests to forfeit bonds for wrongfully restraining the government. Further, under title 28, section 1491(b)(3), the COFC can deny a permanent injunction remedy where the agency's conduct was arbitrary or illegal, but the illegality or arbitrariness is outweighed by national security, national defense, or other public interest considerations.

(long-run) costs—e.g., undermining the deterrent against errors, fraud, and favoritism. In this case, the net effect of reducing protests could turn out to be detrimental to the long-term interests of the Defense Department. It is enlightening to explore what is an understandable aim of the Defense Department: to reduce the rate of successful protests.

1. Exploring the Objective of Reducing the Rate of Successful Protests

In discussing the DoD's objective to reduce the rate of successful protests, it is important to recognize that the impacts of protests on a procuring activity vary greatly. Policies designed to reduce the rate of successful protests can either focus on acquisitions that have a relatively trivial impact on the activity or, instead, on those that are critical to (or on the critical path of) key activity investments and operations. Clearly, scarce leadership time and resources are better spent on the latter (critical, major acquisitions) rather than on the former (non-critical, minor acquisitions).

A simple illustration of this important distinction, using data from the USAF, appears in Figure 3. Over a recent eight-year period from FY2001–2008, even though the rate of successful protests or the "sustain rate" was relatively constant, the magnitude of those protests, or the "impact rate" (measured here in terms of the share of competitive procurement dollars involved), increased dramatically.

If senior leaders were to strictly focus on reducing the sustain rate (or the rate of successful protests), then since the USAF only faced 3 successful protests in 2001 out of the 98 protests of procurements closed that year, it faced a sustain rate of nearly 3%. From this perspective, the protest problem appears to be stable or even declining; there were only 2 successful protests out of 112 closed in 2008, a sustain rate just under 2% (see Figure 3). Unfortunately, simply focusing on the rate of successful protests (the sustain rate) is misleading. It hides the true impact of those protests on the USAF.

It turns out that in 2001, successful protests against the USAF involved roughly $260 million worth of procurements, or an impact rate of around 1% of total competitive procurement dollars that year. Compare this to a contract amount of over $36 billion tied up in the two successful protests in 2008, or an impact rate of nearly 97% of USAF competitive procurement dollars (see Figure 3). It is clear that simply focusing on reducing the rate of successful protests (the sustain rate) risks missing the larger impact those protests have on USAF investments and operations.

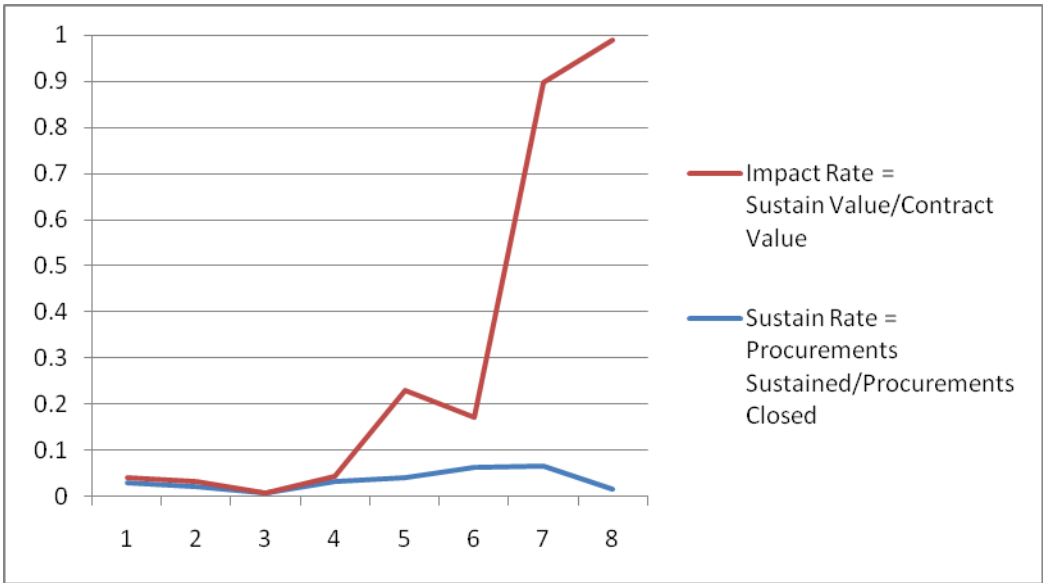

Figure 3. Rate of Successful Protests—Sustain Rate versus Impact Rate
(Data is from USAF Annual Bid Protest Update [January 1, 2009]: Synopsis of Bid Protests [GAO] for FY2001-2008)

In shaping protest policy, senior leadership should focus its attention on critical procurements—i.e., those acquisitions likely to have the greatest impacts on investments and operations if they are protested—possibly, but not necessarily, high cost Major Defense Acquisition Programs. It could be useful for each Service to develop a measure similar to the "impact rate" illustrated in Figure 3. To help shape its protest policies, this study recommends that the Defense Department focus on identifying key factors and characteristics associated or correlated with successful protests of critical, high-impact procurements.

2. How Reducing Protests Can Actually Increase Competition

The assumption captured in the opening quotation of the Introduction—an assumption that appears throughout the legal and regulatory literature—is that protests act as a deterrent to bad behavior on the part of procurement officials. The general conclusion in the literature is that *increasing* the ability to protest is likely to increase competition. However, from an economics perspective, this implicitly assumes we are below the optimum level of protests—or that the social benefits of increasing protests outweigh the social costs.

The Defense Department is concerned with the opposite—reducing the rate of protests. But this implicitly assumes that we are above the optimum level of protests, or that the benefits of reducing protests outweigh the costs. Fortunately, there are two ways to reduce protests that could actually increase competition, regardless of where the Defense Department happens to be relative to the optimum, and conceivably improve procurement outcomes.

Rather than simply adopting a popular objective such as minimizing the number of protests (see Schwartz & Manuel, 2009, p. 1), a more nuanced economics view of the protest problem is based on three fundamental assumptions: (i) incentives matter, (ii) prices matter, and (iii) demand curves slope down. Given these assumptions, and placing ourselves in the shoes of a representative prospective bidder, we obtain a powerful, new, and somewhat counterintuitive insight: Regardless of where the Defense Department happens to be relative to the optimum, there exist policies to reduce protests that can actually increase competition.

The two main explanations for this include one that is obvious and one that is less obvious. The first involves the possibility of reducing protests by decreasing the expected benefits to a disappointed bidder of challenging a procurement action. The second involves reducing protests by increasing the expected costs of a challenge.

(4) Decreasing the expected benefits of a challenge: The first, somewhat obvious, explanation of how reducing protests can increase competition focuses on reducing protests by reducing agency errors, fraud, and favoritism—for example, by substituting protests with alternatives such as random audits and investigations or by investing in training, linking pay and promotion to successful procurement outcomes, and hiring more experienced acquisition personnel.[52] This approach reduces protests but simultaneously tends to build confidence in the integrity of the solicitation and selection process, boosting the expected benefits of participation, and, therefore, is likely to increase competition.

(5) Increasing the expected costs of a challenge: There is another less obvious explanation where reducing protests can increase competition. Even where protests are reduced by raising the expected costs of a challenge—for example, by increasing filing fees, restricting the filing window, abolishing mandatory stay, narrowing standing (i.e., eligibility), raising the threshold for a protest to have merit,[53] or establishing penalties such as fines or exclusions from bidding or filing future protests for truly frivolous/nuisance protests and/or "loser pays" for protests that have some merit but are not sustained—this could still increase competition. In this case, the explanation is less straightforward, but only because it is largely overlooked in the current legal and regulatory literature.

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[52] The Joint Analysis Team (JAT), organized by the Under Secretary of Defense, has collected data that indicates acquisition workloads recently increased while the level of experienced personnel decreased. The data reveals that the DoD has seen a significant drop in its trained, mid-level acquisition personnel. Over the period FY1998–FY2008, those with 10 to 19 years of experience declined from 47% of the workforce to 17% (JAT, 2009).

[53] Raising the threshold for merit involves Type I and II errors from statistical hypothesis testing. Suppose the null hypothesis is that the agency (PO) is innocent. Increasing the burden of proof that an agency is guilty decreases the Type I error (reject null when null is true), but increases Type II errors (accept null/innocent when null is false, i.e., guilty). However, the cost to an agency or department is substantial given the automatic stay assumption of guilty until proven innocent and stands in sharp contrast to the demanding standards required for a preliminary injunction (innocent until proven guilty) at the Court of Federal Claims.

The primary focus of the extant literature is on so-called prospective "losing" bidders. Clearly, bidders that fear losing a competition are more inclined to participate the greater the probability they might get a second bite at the apple (i.e., the greater the opportunity to protest a negative outcome). So while the procuring activity could lower its expected costs of a protest by promoting policies that increase a bidder's expected costs of engaging in a protest, since this increases risks faced by "losing" bidders, if they refuse to participate in the bidding it could harm competition. The conclusion drawn in the legal and regulatory literature is that reducing the ability to protest is likely to reduce competition.

However, the literature is nearly silent when it comes to another important type of bidder: the so-called prospective "winning" bidders. The greater the risk (and expected costs) of protests, the less inclined prospective winning bidders will be to participate in a competition.[54] In focusing on losing bidder types, the literature ignores the role played by winning bidder types. From a winning bidder's perspective, a protest delays the project and generates significant (opportunity) costs to defend an award—similar in nature to delays and costs incurred by the procuring activity.[55] In this case, policies that restrict protests could actually increase competition, since limiting protests generates a greater expected prize that (on the margin) should attract more prospective winning bidder types.

In summary, by selecting policies that reduce the protest risks of procurement activities, the DoD might increase the risks faced by losing bidder types, hurting competition, but it could also reduce the risks faced by winning bidder types,

[54] In other words, they will charge (bid) a higher price to compensate for this extra risk to participate in a competition. Publicly traded government contractor firms are obligated to account for bid protest risks to their investors as part of so-called "forward-looking statements" and disclaimers under the Private Securities Litigation Reform Act (PSLRA) of 1995 (1995). Conversely, a disappointed bidder may introduce the element of risk for winning bidders by publicly announcing that it intends to protest and tagging the threat of protest as a PSLRA statement. The threat of protests (even if unsuccessful) can act as barriers to entry. The prospect of a protest by a losing bidder imposes costs that reduce the expected value of entering the competition (see the representative bidder model in Section III).

[55] As pointed out in the literature, "In post-award protests, awardees will often intervene on the side of the agency to protect their award" (MMR, 1991, p. 14).

boosting competition. The net effect is an empirical question with enormous policy implications. A recommendation of this study is for procurement officials to sponser an empirical analysis to investigate this issue (including an estimate of any bid protest premiums incurred by contractors on capital markets and passed on to the government).

It could turn out that the net effect on competition depends on where an activity finds itself in terms of the optimum rate of protests. For instance, if in some range limiting protests by raising the expected costs of a challenge actually increases competition, then this could mitigate any perceived negative effects that reducing protests has on the integrity, transparency, and accountability of the procurement process.

Ideally, policy initiatives that limit protests could be combined with a portfolio of other carefully selected, cost-effective governance mechanisms (internal audits, external audits, independent investigations, training investments, etc.), reducing the need for the monitoring and oversight role of protests. In terms of limiting protests, an extreme example is found in the private sector. Protest systems are virtually unheard of in the broader economy.

C. Public versus Private Procurement Governance Mechanisms: A Counter-Factual

In sharp contrast to government protest systems, the private sector rarely allows bid protests. Instead, private firms govern their transactions using a different set of oversight mechanisms. They rely more on reputation, internal audits, exacting definitions of buyer requirements (see generally, Johnson, 2003), external (shareholder) audits and on aligning the incentives of procurement personnel with those of the company through performance-based bonuses and promotions.

> Under private contract law, disappointed offerors generally have no right to attack the buyer's choice of suppliers. Private contract law usually provides no basis for recovery where the offeror contends that the buyer: (1) defined specifications of a good or service in a manner that precluded consideration

> of the offeror's goods, (2) refused to consider the bids of specific offerors, (3) failed to adhere to announced selection criteria, or (4) applied its selection criteria unevenly. (Kovacic, 1995, p. 466)

The profit motive helps align the interests of contracting personnel to solicit and select contractual partners that maximize value to the firm. The powerful oversight role of market forces automatically rewards companies that select vendors who offer the best value-added combination of performance, costs, and schedules. Companies with poor contractual outcomes are punished with losses by market forces. They are eventually broken up or go bankrupt. In fact, a firm's contracting reputation is key to its successful interactions with other companies.

> The private contract system relies mainly on reputation to constrain the discretion of private purchasers. … A private buyer cannot afford to treat suppliers of inputs too arbitrarily or unfairly, lest sellers refuse to deal with the buyer in the future. (Kovacic, 1995, p. 466)

In addition, unfairly treated suppliers may have remedies under the Federal or state antitrust laws (see, for example, Federal Trade Commission, 2010). Courts have carefully limited these remedies to avoid granting advantage to individual competitors at the expense of the public interest in competition. For example, remedies for attempted monopolizing of trade in violation of Section 2 of the Sherman Act (2010). "should not attempt to redress harm to competition by 'providing aid to any particular competitor,' but rather should aim 'to restore conditions in which the competitive process is revived and any number of competitors may flourish (or not) based upon the merits of their offerings'" (Department of Justice, 2008). As a result, antitrust remedies for disappointed bidders in private sector transactions are significantly weaker than bid protest remedies for transactions with the public sector.

Transaction Cost Economics (TCE) suggests that cooperative behavior often arises in situations of repeated private interaction in which each side has a sufficient enough stake in the future to outweigh any short-term gains from acting opportunistically (Melese et al., 2007). Either a relationship must be repeated frequently, or the value of continuing the relationship must be high. As long as

performance can be easily monitored by future trading partners, reputation can govern behavior. However, the noisier (more complex/uncertain) the product, service, or the environment, the less effectively this works. As complexity increases and frequency falls, relational contracting tends to evolve from a bilateral relationship to a trilateral relationship.[56]

In this case, a third party (independent auditor, alternative dispute resolution (ADR) agreement, etc.) often provides guarantees to facilitate and improve contractual outcomes. The third party can help monitor transactions or offer arbitration when disputes arise.

Bid protest systems are a type of third-party monitoring mechanism. However, it is sobering to consider what the ramifications would be if the current federal protest process was forced upon the private sector. It would likely shut down entire industries.

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[56] An important insight of the Transaction Costs Economics (TCE) literature (see Melese et al., 2007; Williamson, 1971, 1979, 1999) is that ex-ante competition can lead to ex-post monopoly power. According to basic TCE principles, there is always a risk that firms in a transaction will act opportunistically. The hold-up problem is a classic example. Related to the foot-in-the-door strategy, a firm might strategically bid low to win a contract with the aim of raising prices later. After winning the contract, if a firm invests in specific assets (specialized human capital or equipment, a location advantage, etc.) that make that firm more valuable in terms of the transaction (performance, cost, and schedule), but that also act as a barrier to future entry by competitors, then it acquires the ability to hold-up the government. Since one of the stated goals of a protest system is to increase competition, this is an important consideration. The risk is that valuable investments in assets that are specific to the relationship can change the nature of that relationship from one of ex-ante competition to ex-post monopoly supplier. In this case, the firm has the ability to threaten to hold-up the government and raise prices (say on change orders, etc.) high enough to more than make up for its artificially low initial bid. It would be interesting to determine empirically if the hold-up problem merits more attention than, say, is currently being paid to bid protests in the public procurement selection process. Regardless of who wins, if data suggests that hold-up-type problems routinely contribute to schedules and performance slipping and prices/costs increasing, then winning bid proposals are not credible. Since losing firms no longer have an option to protest, a recommendation might be to consider building a clause into contracts that compensates the losing bidder or interested party (i.e., the first runner-up) in the event that the winning bidder cannot perform what they promised in order to win the competition. The goal is to hold companies accountable for following through with proposals offered to win a contract. The outcome could be more truthful bids/proposals and better outcomes for our troops and taxpayers.

Evidence that imposing the public protest process on the private sector would be prohibitively costly is strongly reinforced by the following example. This example involves a relationship between three private defense contractors and their suppliers/subcontractors.

To place the potentially crushing costs of a private bid protest process in perspective, consider the findings of a 1992 Commerce Department study that examined the supply chain for three representative U.S. Naval weapon systems: the HARM missile, the Mark-48 ADCAP torpedo, and the Verdin communication system. It turns out that a total of "11,638 companies … [served] as active suppliers to the prime contractors for the three weapon systems," 6,818 for the HARM missile, 1,483 for the Verdin, and 3,336 for the Mark-48 torpedo (Department of Commerce, 1992).[57]

Forced to abide by the government's bid protest process in dealing with their multiple suppliers and subcontractors, these companies would have incurred prohibitively high transaction costs. The protest process would have imposed significant delays, cost-overruns, and performance gaps that would have forced much of the work in-house or shut down operations entirely. The likely result: lower performance, higher costs, and significant delays in the three weapons systems. This sobering example should place the considerable burden of a bid protest process in perspective.

[57] These are not unusual cases in the defense sector. There are strong ("rent-seeking") incentives to proliferate suppliers across political jurisdictions in order to increase the probability of favorable treatment in congressional appropriations. For example, the Air Force B-1 program had subcontractors in 49 states, and the B-2 had subcontractors in all 50.

So why does the protest process dominate public procurement law[58] and give disappointed bidders/offerors such expansive rights to challenge an acquisition? The answer lies in the economist's principal-agent problem.[59]

D. The Principal-Agent Problem

The delegation of procurement authority raises a principal-agent problem. In the simplest terms, the government (the principal), who represents troops and taxpayers, asks procurement officials (agents) to conduct procurement actions on its behalf. The principal-agent problem arises if there are conflicting objectives (i.e., if agents do not have the same objectives as the principal) and if key aspects of the agent's behavior are not easily monitored (also known as the agency problem).[60]

A serious issue in the public sector is that the reward system does not encourage a high level of effort (training investment or experience) and does not necessarily align the interests of the agent with the principal. The risk is that the principal's (taxpayers and troops) objectives of better, faster, cheaper may not be fully adopted by agents (procurement officials) responsible for carrying out those decisions: . "Government

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[58] Two arguments occasionally heard that help explain the willingness to incur the burden of bid protests to govern public procurement are: (1) that government has enormous power to influence the economy and the fortunes of individual firms through its purchasing decisions, and (2) that because the expenditure of public funds is at issue, and the government should take extraordinary precautions to ensure taxpayer interests are protected.

[59] Selected examples of the literature include Grossman and Hart (1983), Sappington (1991), Holmstom and Milgrom (1991), and Prendergast (1999).

[60] A classic solution to a principal-agent problem is found in the popular saying "If you want something done right, then do it yourself." Principal-agent problems can arise in a number of different ways. One example of Conflicting Objectives is a situation in which a procurement official (PO) might bias an award to a favored bidder to minimize their own transaction costs (i.e., administrative costs), even though that bidder offers higher production (direct) costs. For example, it is often easier for a PO to select a product or an incumbent firm with which they are more familiar. ("No one was ever fired for buying from IBM"). A second example of Conflicting Objectives is a situation in which there are issues related to asymmetric information. POs may not be as well informed about the product they are buying if government personnel have less experience than their private-sector counterparts and if purchases involve idiosyncratic (complex, uncertain, highly differentiated) goods that are infrequently purchased. A key question revolves around incentives for POs (agents) to educate themselves and negotiate the best deal for the government (principal).

purchasing agents lack the same incentives as their private sector counterparts to make procurement choices that maximize interests of their principals. … Private firms … develop monitoring and incentive schemes that [motivate] purchasing agents to make efficient contracting choices" (Kovacic, 1995, p. 467).

The principal-agent problem is not as pronounced when standard (homogeneous) products like food products are being procured. In this case, simply requiring competitive bidding effectively combats incentive problems.[61] The procurement official has little discretion and any attempt to award a contract to a firm other than the lowest bidder can easily be detected.

However, the focus of this study is on highly differentiated (heterogeneous), complex products (or services) that allow procurement officials to retain substantial discretion in formulating and applying scoring methodologies to evaluate and select alternatives and to determine the optimal exclusion of firms. This requires highly competent procurement officials who are presented with incentives aligned to obtain the best possible outcomes for our troops and taxpayers. Unfortunately, institutional constraints on pay and benefits limit the power of incentive contracts to align the interests of procurement officials closely with those of taxpayers and troops. [62]

Related to this are two other institutional constraints, rapid turnover and the revolving door. Both result in agents (procurement officials) having relatively higher discount rates, i.e., emphasizing visible current benefits of a procurement action that will benefit their career and deferring less visible costs that might be incurred as a result of that procurement action until after they depart. This is especially true if a procurement official views his or her current employment as a stepping stone either

[61] Competitive procurements also help overcome the challenge of asymmetric information (i.e., the relative ignorance of buyers) if well-informed sellers compete against one another for the contract.

[62] With a highly differentiated, complex, uncertain, heterogeneous product (i.e., MDAP), it is more difficult to verify that the awardee necessarily offers the best combination of price and quality, hence the need for more sophisticated oversight.

to a promotion to another position within the government or to a better job opportunity in the private sector.[63]

Compounding these incentive problems is the fact that agency errors are more likely to occur when the government has difficulty retaining personnel because salaries are low compared to the private sector and when personnel are rapidly rotated through procurements (with the corresponding challenge of preserving accountability). The result is inadequate experience and technical knowledge,[64] which requires that agents depend on vendors to help draft solicitations, creating a further wedge between the principals' and the agents' objectives. Of course, this also creates unfair opportunities for some firms to gain an advantage in an acquisition. Third-party oversight of the procurement process is needed if the government's objectives are not equally shared by procurement personnel who administer the process, or if legitimate errors arise that can bias source selection.

Closely related to this is the "appropriability" problem. The appropriability problem is an incentive problem that arises when procurement officials (agents) cannot appropriate (or are not fully compensated for) the value of any extra effort they make in their positions, and it arises when those efforts are not easily measured or monitored. For example, including extra bidders in an acquisition can potentially reduce costs for the government (principal), but it means extra work for a procurement official (agent). An appropriability problem exists if the agent incurs the full costs (responsibility) of running a procurement (evaluating extra bids, etc.), but receives little of the extra benefits. In this case, for example, a decision to bundle

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[63] Other institutional constraints such as yearly budget appropriations make planning horizons shrink, constraining administrative resources and resulting in end-of-year use-it-or-lose-it decisions, which are combined with reprogramming constraints that govern the inter-temporal substitution of funds. The result can be that short-handed personnel are asked to complete procurement-related tasks in relatively brief periods, where the measures of a job well done are the costs incurred in running the procurement and the speed with which the final product is delivered. Suboptimization at different levels in the organization can inadvertently result in misaligned incentives.

[64] This is well documented by the JAT study team (2009) as a "potential root cause" of successful protests.

several contracts together might actually reduce the agent's costs (and the costs of the transaction), but could also reduce the number of bidders, thereby limiting competition, resulting in a less favorable procurement outcome.

The appropriability problem can also be manifested in reduced incentives to test products or in overlooking alternative solutions to satisfy demands, say by ignoring new products or vendors. Of course, another explanation for too little effort being exerted is that agents (program managers, etc.) are not allocated sufficient resources. In this case, lower effort is the result of dedicated program managers simply not being allocated the resources to accomplish the high-quality results that our troops and taxpayers deserve.[65]

A risk acknowledged both in the literature and in practice is that conflicting objectives of procurement officials are occasionally reflected in fraud and favoritism (corruption), or in inadequate investments in human capital (errors).[66] In the case of corruption, the risk is that procurement officials might steer an award to a favored bidder in exchange for private benefits (favors or bribes) at the expense of higher public costs. Favoritism can be generated in many ways, some pernicious (bid-rigging, bribes, expectations of future employment, etc.) and some benign

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[65] Alternatively, too little effort might simply be a manifestation of the risk of over-deterrence, discussed earlier. Procurement officials risk becoming paralyzed by their attempts to follow the mountains of rules and regulations that currently govern the procurement process and that are subject to oversight by the protest process.

[66] A related issue is the incentive problem arising from conflicting lines of authority—for example, a contracting officer and a program (technical or project) manager. The technical officer is responsible for assessing agency needs and writing the technical portion of the solicitation and for assisting in negotiations and technical evaluation of proposals. The contracting officer has primary responsibility for negotiations, evaluation, award, and administration of a contract. Technical officers are motivated to purchase the best technology available, given the budget, while contracting officers want to assure regulatory compliance and rapid completion. Technical people tend to support higher technology while contracting people push for more competition. The resulting specifications and evaluation criteria emerge from a bargain between the two, including issues such as how much weight to give cost versus quality (technical factors/attributes) in the scoring function. For example, "In DoD, there is a mind-set that, since human lives are at stake in military conflicts, any expense is justified in acquiring the latest and best technology" (MMR, 1991, p. 5). We abstract from this potential complication of the principal-agent problem by aggregating the two into a single "procurement official."

(friendships, personal preferences, etc.). When appropriability problems prevent government procurement officials from receiving adequate rewards for decisions that benefit taxpayers, the risk is that "lower pay scales and weaknesses in the incentive systems used to motivate public employees [will make] government officials … more prone to succumb to … temptations" (Kovacic, 1995, p. 488).

These "temptations" can be reflected in abuses of discretion by procurement officials such as (a) failure to make appropriate quality-price tradeoffs, (b) the tendency to skew specifications and source selection decisions to favor incumbent suppliers, and (c) underinvestment in activities that maximize taxpayer interests. In this case, third-party oversight mechanisms help ensure that procurement officials follow rules and regulations and do not unduly restrict competition. Protests can be interpreted as a powerful oversight tool that compensates for weaknesses in incentives[67] generated by conflicting objectives: "A robust protest system helps cure principal-agent problems that arise in the public procurement system … by increasing the likelihood that deviations by the agent (the purchasing agency) from the guidance of the principal (Congress) will be detected and corrected" (Kovacic, 1995, p. 486).

Another rationale occasionally heard to justify third-party monitoring is that government purchasing officials are less competent (more prone to making errors) than private-sector purchasing agents: "Compared to its industry counterparts, [the DoD contracting] workforce is undertrained, underpaid, and inexperienced" (Kovacic, 1995, p. 487).

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[67] The intent of the Congress expressed in the CICA was for the protest process to encourage private enforcement of laws and regulations through full and open competition. There is another principal-agent problem in enforcing procurement regulations that can be resolved with protests. Rather than depend on government agencies (auditors, inspectors, etc.) to monitor compliance in the public interest, the protest process aligns the private interests of the bidders/offerors who have a stake in the procurement outcome to ensure the proper conduct of the procurement (delegating enforcement to disappointed bidders). If the protest machinery provides powerful remedies (stays, the award of attorneys fees, re-competition, etc.), then this can supply strong incentives for private contractors to provide oversight and police and monitor acquisitions.

The protest process can also be viewed as compensating for deficiencies in the skills of government purchasing personnel by reducing their discretion and subjecting their decisions to more oversight[68]: "Protest controls are one part of a large body of regulatory safeguards that are deemed necessary to deter and punish ineptitude, sloth, or corruption of public purchasing officials" (Kovacic, 1995, p. 469).

However, it is not clear that any empirical analysis has conclusively demonstrated government purchasing officials make less-sound procurement choices than their private-sector counterparts.[69]

> There is scant empirical evidence for judging whether public purchasing officials are more prone to "shirk" in maximizing taxpayer interests than private purchasing officials are to shirk in maximizing shareholder interests, or what net effect … protest controls have had on procurement outcomes. (Kovacic, 1995, p. 491)

Protests are one means of deterring and correcting principal-agent and appropriability (agency) problems in public procurement. Another approach is to improve public-sector pay and training for procurement officials—or human capital investments. Internal audits, external audits, investigations, sanctions, and penalties offer other approaches—all of which are attempts to increase transparency and accountability in procurement.

> A primary purpose of oversight is to control the discretion of government officials who make contract awards, since their incentives are often poorly aligned with the interests of taxpayers. … [O]versight induces procurement officials … to make purchase decisions that are more consistent with the objectives of the government. (Marshall et al., 1991, p. 2)

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[68] Private-sector purchasing organizations achieve competition by strictly limiting discretion of their purchasing officials. For instance, General Motors information technology purchasing process provides for clear definition of scope of work, one-time negotiation, firm-fixed price contracts, and a change management process subject to robust discipline. Federal purchasing officials are not similarly constrained (see Johnson, 2003).

[69] Literature suggests that private-sector purchasers make better procurement decisions because of greater emphasis on competition and greater constraints on buyer discretion (see generally, Johnson 2003).

A challenge for the DoD is to choose an optimum mix (portfolio) of governance mechanisms that will minimize the costs of aligning incentives—to reduce the risk of fraud and errors and to encourage competition—and that will guarantee the best possible procurement outcomes for our troops and taxpayers.[70]

E. Alternative Governance Mechanisms: Human Capital Investments and Third-Party Monitoring to Address Principal-Agent Problems in Procurement

The goal of military procurements is to obtain the best (troop) value for (taxpayer) money. A recent study suggests this can be accomplished by carefully adopting one of six ways to structure an acquisition.[71] The first so-called *Economic Evaluation of Alternatives (EEoA)* was the approach originally employed by RAND to structure the KC-X aerial tanker refueler competition: given a particular user-determined performance and schedule combination, select the vendor that offers the lowest (discounted) total system life-cycle costs.[72] "Here, an 'alternative' can be a fleet consisting of a single type of aircraft. … [I]n this AoA, the most 'cost-effective' alternative means precisely the alternative whose effectiveness meets the aerial refueling requirement at the lowest cost" (Kennedy et al., 2006, p. 7).

Structuring procurements and evaluating and selecting vendors to obtain the greatest cost effectiveness (or value for money) requires a delicate balance between rules and discretion. This is an important issue in the design of any regulatory

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[70] As shown in the companion report, DoD must also ensure that its agency procurement officials manage bid protests in ways that are not encumbered by parochial or personal considerations and that align with DoD interest in reducing protest-related costs and delays (see Benishek et al., (2011, pp. 107–113).

[71] The main contribution of these six techniques is to offer alternative approaches to the contentious issue of weighting costs and performance—responsible either directly or indirectly for multiple protests (see Melese, 2009).

[72] The second EEoA approach is for procurement officials to estimate a multi-year budget for the overall program, and then to select the vendor that offers the best possible performance and schedule combination over the relevant time period. Similar to these first two approaches, the remaining four require procurement officials to estimate future budgets for a program, in addition to estimating the costs and performance of individual alternatives.

regime, and it is especially relevant in attempts to re-shape the bid protest process. This trade-off between rules and discretion is reflected in the following observation:

> When we design organizations based on rules, we guard against disaster, but at the cost of stifling excellence. … Government officials deprived of discretion which could produce misbehavior, are at the same time deprived of discretion that could call forth outstanding achievement. (Kelman, 1990, p. 28)

As discussed earlier in the context of over-deterrence, a heavily rule-based approach involves significant transaction costs that can adversely affect the efficiency and effectiveness of procurements, but on the other hand, greater discretion exacerbates the principal-agent problem. To complement any increased role of discretion,[73] Arrowsmith et al. (2000) offer a valuable reminder:

> Where the role of discretion is increased in the procurement system, careful attention needs to be given to matters such as professional training and recruiting high-caliber procurement personnel—which may involve … enhancing pay or the career development structure, or recruiting from the private sector. (p. 85)

The appropriate balance between rules and discretion also depends on attitudes towards corruption and the skills of procurement personnel. The greater the investment in human capital and the better aligned the incentives, the greater the opportunity to relax regulatory constraints.

According to the United Nations *Guide to Enactment of the Model Law on Procurement*, "an effective means to review acts and decisions of the procuring entity and procurement procedures … is essential to ensure the proper functioning of the procurement system and to promote confidence in the system" (UNCITRAL, 1995, p. 99).

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[73] "Much greater freedom should be given in decisions that affect a manager's ability to accomplish his mission. Then the manager should be held responsible for how well he does in accomplishing the mission. … [E]nergy that now goes into the development of rules to restrict public officials should be redirected toward thinking about how to develop results-based performance evaluation" (Arrowsmith et al., 2000, p. 78).

The challenge is to choose the most cost-effective portfolio of initiatives that aligns incentives and that provides adequate monitoring and enforcement of procurements in order to reduce the risk of fraud and errors and to encourage competition. In searching for alternative approaches, the optimum mix will include targeted investments in human capital as well as centralized (audits and investigations) and decentralized (bid protests) third-party governance mechanisms.

Valuable human capital investments include initiatives for building integrity (e.g., ethics training, clearly stated and widely distributed standards of conduct, etc.), acquisition training (e.g., augmenting skills and experience), and pay for performance (or other ways to align incentives to improve procurement outcomes).[74] In general, third-party governance mechanisms increase transparency and improve accountability. "Procurement laws which emphasize transparency generally contain extensive provisions to [verify] compliance … [and] some *mechanism for supervision and enforcement*, [emphasis added] whether by the administrative hierarchy, the public or legislature, or by aggrieved firms through a complaint [bid protest] procedure" (Arrowsmith et al., 2000, p. 75).

Bid protest systems are an example of a decentralized third party governance mechanism that relies on private enforcement to increase transparency and accountability in procurement.[75]

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[74] "Many systems, especially those which emphasize … transparency, make provisions for some means of external enforcement. … Of course the extent of compliance with the rules will also be greatly affected by … factors such as the quality and training of procurement and management personnel, levels of pay and incentives, and the general 'culture' of the procuring institution [including] requirements for review and approval of procurement decisions" (Arrowsmith et al., 2000, p. 749).

[75] The bid protest process provides decentralized oversight by making procurement decisions subject to challenge by bidders (or offerors). The basic premise underlying the bid protest system is that a robust protest mechanism improves procurement performance by generating competition for government contracts and by monitoring the performance of government officials who may not exercise discretion to the benefit of taxpayers. A recommendation is to collect data to determine whether the protest process and process reforms have improved the performance of government buyers and procurement outcomes.

In order for a procurement process to achieve value for money, the three most frequently cited policy goals are equity, efficiency, and integrity:

> The history of federal procurement law demonstrates a concern for three policy goals, namely: *equity* (in the sense of fair access of bidders to the procurement); *integrity* (i.e., no corruption); and *efficiency* (meaning the selection of [the best vendor]. … [A] court commenting on procurement law noted that "the purpose of these statutes … is to give all persons equal right to compete for Government Contracts; to prevent unjust favoritism, or collusion or fraud [in awarding government contracts]; and thus to secure for the Government the benefits which arise from competition." (as cited in Marshall et al., 1991, p. 2)

Protests offer a type of third-party oversight mechanism that addresses principal-agent problems related to these three core policy goals: integrity (minimizing fraud and errors), equity (maximizing competition), and efficiency (value-for-money). The economics approach reveals significant (opportunity and transaction) costs in the protest process. However, we must be careful what we wish for. It is important to recognize that any modifications of the protest process, or alternative actions and initiatives that provide oversight of the procurement process with the goal of promoting integrity, equity, and efficiency, will also entail significant (opportunity and transaction) costs as well as risks of unintended consequences.[76]

The operation of the current protest system reflects an assumption that the costs of protests are less than the costs of relying on alternative monitoring and enforcement mechanisms to achieve the same policy goals (integrity, equity, efficiency) and to: "ensure the proper functioning of the procurement system, and to promote confidence in the system"[77] (Arrowsmith et al., 2000, p. 83). A

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[76] It is important to include transaction cost considerations in the economic analysis of alternatives and source selection decision (see Melese et al., 2007). These include the administrative costs of the award process and the costs of the monitoring and oversight of protests, audits, and other governance mechanisms to promote the legal integrity and economic efficiency of the procurement process in order to select the best possible products and services on behalf of troops and taxpayers.

[77] "Any loosening of the procurement regulatory straightjacket should be accompanied by, and linked to, increased resources for public corruption investigations. … Deregulation of the procurement

recommendation is to evaluate the costs and benefits of alternative approaches that might improve procurement outcomes—including human capital investments and third-party governance mechanisms. The full costs of protests must include the visible costs of actual protests as well as the largely hidden costs of defensive practices (Buy-offs, Fed-mail, and over-deterrence) to avoid protests.

Table 1 offers a proposed framework to collect data and expert opinions to help evaluate alternative governance mechanisms. The first column lists the evaluation criteria, including the procurement policy goals of integrity, equity, and efficiency. To achieve these policy goals, a brief list (portfolio) of possible alternative governance mechanisms appears across the top.

Bid protests, whistle-blower lawsuits, and integrity pacts are examples of decentralized third-party governance mechanisms. Internal audits, external audits, alternative dispute resolution (ADR), and IG investigations are examples of centralized oversight mechanisms. Centralized and decentralized oversight mechanisms can act either as complements or substitutes. Carefully crafted human capital investments (training, incentive schemes, etc.) can also substitute for more costly centralized and decentralized oversight.[78]

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system should also be accompanied by an increase in criminal penalties for procurement corruption" (Arrowsmith et al., 2000, p. 83).

[78] For example, major investments in training and recruiting experienced procurement officials and in establishing new policies to reward successful acquisition outcomes could be matched with a change at the GAO to adopt the Court of Federal Claims (COFC) default of innocent until proven guilty in not granting automatic stays that disrupt the procurement process and inadvertently provide Fed-mail and Buy-off incentives.

Table 1. Evaluation of Alternative Governance Mechanisms: Human Capital Investments and Third-Party Monitoring to Address Principal-Agent Problems in Procurement

Goal: ***VALUE-for-MONEY***	**Protests 1) Agency 2) GAO 3) COFC**	**Internal Audit; IG; Peer Reviews**	**External Audit; GAO; CAPE**	**Inspector General; ADR; Trusted Agent; Integrity Pacts**	**Invest in Human Capital**
***Integrity*:** **Minimize Fraud & Errors (Transparency & Accountability: Anti-Corruption & Regulatory Compliance)**	Green 				
***Equity*:** **Maximize Competition (Increase Participation)**	Yellow 				
***Efficiency*:** **Cost-effective Products & Services (Cost, Performance & Schedule)**	Red 				
BENEFITS (Advantages)					
COSTS (Disadvantages)					

The stated goal of this project is to offer senior decision-makers a useful framework and perspective for evaluating, articulating, and supporting protest policy recommendations that improve procurement outcomes. A valuable exercise would be to refine and extend the list of alternative approaches that appears in Table 1, identifying actions and initiatives that substitute for (and complement) protests. Combining data with best practices and expert opinion to fill the cells of the matrix would reveal advantages and disadvantages of alternative mixes (portfolios) under investigation. The results in each cell could be interpreted through a stoplight chart, such as that illustrated in the second column of Table 1. The last two rows of cumulative benefits and costs could then help guide senior leadership in reviewing

any recommended changes in the protest process to improve procurement outcomes.[79]

Completing a table like the one illustrated in Table 1 requires evaluating the benefits (advantages) and costs (disadvantages) of the different alternatives.[80] Traditional centralized oversight mechanisms rely on government officials to allocate enforcement resources. This generally involves an auditor or inspector general who is independent of the regulated activity deciding which (pre- or post-award) procurements to review. This study focuses on the benefits and costs of the bid protest system, a decentralized governance mechanism in which the allocation of enforcement resources is mostly decided by self-interested contractors.

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[79] The matrix could also help evaluate any offsetting (or complementary) actions or initiatives that might be required to implement proposed changes in the bid protest process in order to reduce overall costs and delays.

[80] Whereas protests tend to be input focused, audits and investigations tend to be more output/outcome focused—although they can also review the input phase. Given sufficient resources (increasing transparency, the probability of a review) and enforcement power (improving accountability, the consequences of a good or bad review), centralized audits and investigations can have a powerful impact to reduce fraud and errors and increase competition. Since they are initiated by government officials, centralized approaches also tend to avoid many of the pitfalls of protests such as Fed-mail, Buy-offs, and over-deterrence—which means the full costs of conducting these are more transparent. A disadvantage of audits is that enforcement is often weak or non-existent, except perhaps when the media picks up the story. Also, random audits are likely to review properly conducted procurements, while protests only tend to occur when there is a suspicion of impropriety. Two further observations are helpful: (1) the auditor may be poorly informed relative to a disappointed bidder, and (2) auditors generally lack the profit motive that drives the behavior of a protester (private attorney general). The decentralized enforcement of disappointed bidders offers better alignment if self-interested private attorneys general have better information than auditors about deviations from procurement statutes and regulations. Another cost is the opportunity costs of auditors and their staffs and the agency that is undergoing an audit, which includes costs (and opportunity costs) of collecting and analyzing information. An internal audit relies on ex-post auditing by entities within the agency (such as the IG, the competition advocate, or DCAA). Audit authorities could recommend rewards or punishments for procurement officials, adjustments in acquisition procedures and techniques, or payments of damages to wrongfully excluded offerors. An external audit is one alternative; it relies on ex-post auditing by external observers (such as the GAO's auditing unit). Audit authorities could recommend rewards or punishments for procurement officials, adjustments in acquisition procedures and techniques, or payments of damages to wrongfully excluded offerors. Other approaches include ADR and other preventions and resolution tools addressed in the *Better Acquisition Management* companion report; posting a bond, bringing in an auditor to bless the procurement, using a trusted agent (ombudsman), and using Transparency International's integrity pacts.

F. A Brief Review of the U.S. Federal Bid Protest System

In the United States, a disappointed (or prospective) bidder/offeror has three major options to contest the award of a federal contract. Protests can be filed with the procuring agency (C.F.R., 48 § 33.103[c]), with the Government Accountability Office (GAO) (U.S.C., 31 § 3551 et. seq), or with the U.S. Court of Federal Claims (COFC) (U.S.C., 28 § 1491[b]). The distribution of protests filed over the last several years at the GAO and the COFC is illustrated in Tables 2 and 3. A weakness noticed in the literature is that: "Unfortunately, no comprehensive statistics exist that summarize the number of protests at the agency level or the success rates of such protests" (Schaengold et al., 2009, p. 4).

A recommendation of this study is for the DoD to collect data that summarizes agency-level protests (in a manner similar to the data routinely displayed for GAO protests and the COFC). Also, because most agency protest decisions are not published, there is limited transparency, and the lack of a record of precedent deprives future protesters—and the agency itself—of the benefit of the agency's reasoning on prior decisions.

The number of bid protests filed with the COFC is a small fraction of those filed with the GAO. For example, in FY2007, protests filed with the COFC (70) were less than 5% of those filed with the GAO (1,411). As a consequence, the discussion below focuses on GAO protests.

According to Worthington and Goldsman (1998), two (possibly conflicting) concerns are reflected in any protest process: efficiency and effectiveness. An "efficient" bid protest process ensures that protests are handled expeditiously, thereby minimizing disruptions to the acquisition process. An "effective" system (related to the criteria of *integrity* in the matrix in Table 1) ensures that disappointed bidders are given a forum to air their grievances and that agency officials are held accountable for their actions (Worthington & Goldsman, 1998, p. 472).

Table 2. GAO Bid Protest Statistics, FY2001–FY2008
(Schaengold et al., 2009, p. 255)

FY	2001	2002	2003	2004	2005	2006	2007	2008
Protests Filed	1,146	1,204	1,352	1,485	1,356	1,327	1,411	1,652
Protests Closed	1098	1133	1244	1405	1341	1274	1393	1581
Closed Protests Resolved on their Merit	311	256	290	365	306	249	335	291
Sustained in Whole or Part	66(21%)	41(16%)	50(17%)	75(21%)	71(23%)	72(29%)	91(27%)	60(21%)
Effectiveness Rate	33%	33%	33%	34%	37%	39%	38%	42%
Cases Resolved Through ADR	150(84%)	145(84%)	120(92%)	123(91%)	103(91%)	91(96%)	62(85%)	78(78%)
GAO Hearings for Fully Developed Decisions	63(12%)	23(5%)	74(13%)	56(9%)	41(8%)	51(11%)	41(8%)	32(6%)

Table 3. Bid Protests at the U.S. Court of Federal Claims, FY2000–FY2007
(Schaengold et al., 2009, p. 255)

FY	2000	2001	2002	2003	2004	2005	2006	2007
Number of Cases Involving Bid Protests	54	57	39	55	69	61	73	70
Percentage of Cases Involving Bid Protests	6.8%	7.3%	2.6%	1.8%	2.9%	3.6%	6.8%	6.4%

Two of the three U.S. protest forums are described in detail in Appendix 1:, Agency-Level Protests and the GAO Bid Protest Process. Appendix 1 offers a more precise and detailed overview that includes protest process flowcharts developed for each of the three major forums.

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III. An Economic Framework & Potential Change Candidates: A Decision Model

As discussed earlier, the objective of firms doing business with the government is to maximize profits, i.e., to provide a market-based return on capital to shareholders. Meanwhile, the intent of a protest system is to provide a decentralized governance mechanism to oversee the integrity, equity, and efficiency of the procurement process. Although the government's intent is for protesters to act as a type of third-party oversight of government buyers (procurement officials, etc.), the reality is that because protesters themselves are in competition as sellers, they have conflicting objectives. Their motivation is not simply to detect errors and fraud, but to maximize profits.

As this study has highlighted, profit maximization can lead firms to undertake protests for reasons substantially different from, and fundamentally opposed to, the government's objectives (i.e., to minimize errors and fraud on the part of procurement officials and to increase competition). Firms use the protest process strategically to improve their competitive bargaining position and are likely to be equally strategic in their decision of whether to protest an award.

The dual objective of this section is to present an economic framework of a representative bidder's decision whether to (i) participate/compete in a public procurement and (ii) protest in the event they lose. This requires converting the legal/regulatory protest process flowchart (illustrated in Figure 4) into a representative bidder's decision tree (similar to Figure 2). This exercise reveals a set of variables under government control that can influence a contractor's protest decision. Among these variables are key factors that impact the expected benefits and costs to a disappointed bidder of filing a protest.

A. Highlights of the GAO's Bid Protest System: A Protest Process Flowchart

Figure 4 offers a detailed process flow of actions and events that impact three key players: a protester, the agency defending against the protest, and the GAO. It is useful to highlight several aspects of Figure 4.[81]

An agency has 5 options with which to respond to the filing of a protest. The first option for the agency is to move to dismiss the protest on the grounds that the protest was frivolous, meritless, or outside the GAO's jurisdiction. This option allows the agency to avoid up to 100 days of delay (the statutory time limit for a GAO bid protest); to preserve the agency's acquisition strategy, its competitive range, or its award decision; to prevent discovery and extensive production of documents; to save the agency's legal and administrative costs of defending the protest; and to avoid potential payments of protester's legal fees as well as protester's bid and proposal preparation costs. The protester can respond to the agency motion by withdrawing the protest or opposing the motion. If the protester opposes the motion, the GAO may dismiss the protest with a summary dismissal, dismiss with a dismissal opinion, or refuse to dismiss the protest.

The agency's second option is to undertake corrective action by affording the protester some form of relief. This option allows the agency to avoid up to 100 days of delay (the statutory time limit for a GAO bid protest); to save the agency's legal and administrative costs of defending the protest; and to avoid potential payments of protester's legal fees. However, corrective action may involve changing or reversing the agency's acquisition strategy, its competitive range, or its award decision; payment of protester's bid and proposal preparation costs; or other relief to the protester. The protester may either agree to the corrective action or request further

[81] This process description is further described in Chapter II(C), Guide to Agency Management of the Protest Process to Minimize Time Delays and Costs in Benishek et al. (2011, pp. 10-41).

corrective action. An agency may refuse further corrective action and proceed to a third or fourth option.

The agency's third option is to engage in alternative dispute resolution (ADR). This option allows the agency to avoid up to 100 days of delay (the statutory time limit for a GAO bid protest); to save the agency's legal and administrative costs of defending the protest; and to avoid potential payments of protester's legal fees. However, corrective action may involve changing or reversing the agency's acquisition strategy, its competitive range, or its award decision; payment of protester's bid and proposal preparation costs; or other relief to the protester. The protester may either agree to use ADR, or disagree to use ADR. If the protester agrees to use ADR, the ADR can take the form of negotiation assistance facilitated by the GAO or ADR without GAO involvement, such as direct negotiation, mediation, or arbitration. If ADR succeeds, it can result in corrective action or withdrawal of a protest. If ADR fails, the agency can proceed to option 4, agency defense by agency report. The regulatory timing for filing the agency report within 30 days from the date of award is not affected by the agency's decision to pursue ADR.

The agency's fourth option is to defend the procurement by filing its defense in the form of an agency report within 30 days of the filing of the protest. This option allows the agency an opportunity to protect its acquisition strategy, competitive range decision, or award decision. However, the agency will incur a delay of up to 100 days (the statutory time limit for a GAO bid protest) and incur legal and administrative costs of defending against a protest. Further, if an agency takes this option and subsequently loses the protest, it will be obligated to pay the protester's legal fees and costs. If an agency takes this option and subsequently loses a protest after a "best interests" override was put in place, the law authorizes the GAO to recommend relief regardless of any impact on the program.

A protester may file opposing comments or withdraw a protest. The protester may also file a supplemental protest. The agency is able to exercise the same response option in regards to the supplemental protest as in regards to the original

protest, and GAO will consolidate all protests together for a single resolution. The protester may also request a hearing. The GAO may conduct a hearing on one or all protests, in which case the parties will be asked to file post-hearing comments.

Following the full exchange of comments, the GAO may conduct outcome prediction ADR. During outcome prediction, GAO will recommend either to sustain or to deny the protest. If the GAO recommends to sustain the protest and the agency agrees, an agency may take corrective action in accordance with GAO recommendation. The protest is then dismissed as academic. If the GAO recommends a denial or if the agency or the protester disagree with the outcome prediction, they can ask GAO to issue an opinion.

Once the GAO issues an opinion with or without outcome prediction, the parties may ask for reconsideration. If the GAO opinion (including the reconsideration request) denies the protest, the protester may file a protest at the Court of Federal Claims. If the GAO opinion (including reconsideration) sustains the protest and recommends relief, the agency can provide the protester the recommended relief or refuse to follow GAO's recommendation. The GAO will report the agency to Congress and recommend sanctions or relief including private relief legislation, rescission or cancellation of funds, Congressional investigation, or other action. Further, if the agency refuses to follow the GAO's recommendation, it can request the Office of Federal Procurement Policy within the Office of Management and Budget, or the Office of Legal Counsel within the Justice Department, to issue an opinion supporting its position.

In addition to the fourth option, the agency may also undertake the fifth option: a request for an express option. This request must be made not later than 5 days after protest filing. Under this option, the agency would defend the procurement by filing its defense in the form of an agency report within 30 days of the filing of the protest. This option allows the agency an opportunity to protect its acquisition strategy, competitive range decision, or award decision. However, the agency will incur a delay of up to 65 days instead of the usual 100 days (the

statutory time limit for a GAO bid protest) and incur legal and administrative costs of defending against a protest. Further, if an agency takes this option and subsequently loses a protest, it will be obligated to pay a protester's legal fees and costs. If an agency takes this option and subsequently loses a protest after a "best interests" override was put in place, the law authorizes the GAO to recommend relief regardless of impact on the program.

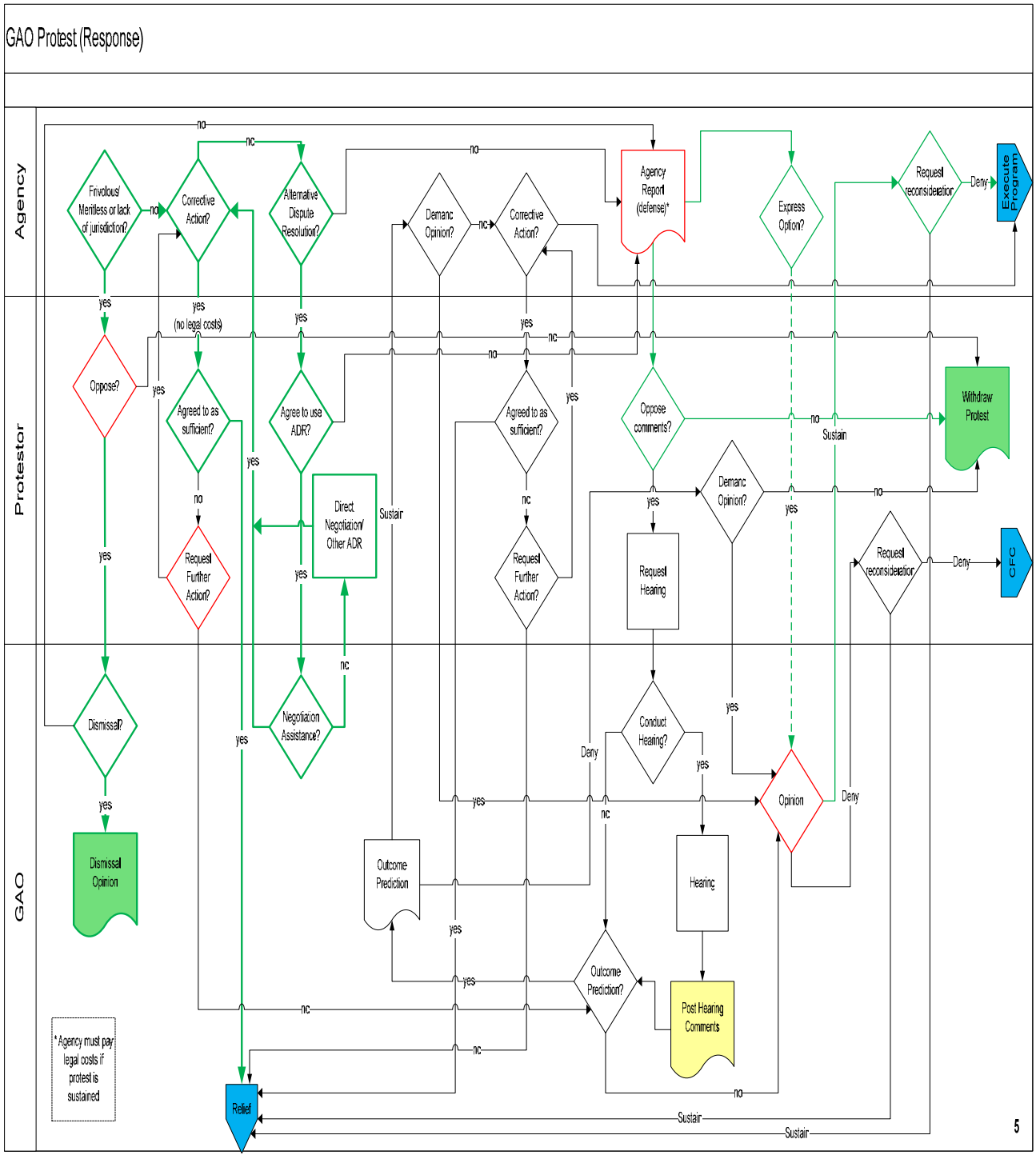

Figure 4. Agency Response to Bid Protest at the GAO

B. The Disappointed Bidder's Problem: A Decision Tree

The final GAO opinion, issued within 100 days (or 65 days under the express option), will either sustain or deny the protest. If the protest is sustained, then the protester earns an award, represented by X_A. If the protest is dismissed or denied, then we assume the protester settles for (or pursues) the next-best alternative project whose value is *Xo*.

Recognizing the competing interests and conflicting objectives of the different players in the protest process—i.e. assuming the protester maximizes profits, including future business opportunities; the agency maximizes troop value for taxpayer money; and the GAO acts as an arbiter—suggests converting the protest process flow into a protester decision tree. Streamlining and simplifying the protest process illustrated in detail in Figure 4 suggests a straightforward decision tree similar to that illustrated in Figure 2. This new decision tree offers a slight extension to the disappointed bidder decision problem developed earlier.

The decision tree illustrated in Figure 5 underpins the economic framework developed in this section. The disappointed bidder must decide whether to file or not file a protest. As discussed earlier, a typical firm will calculate the expected value (profit) of filing a protest, i.e., its expected benefits and expected costs. It will only file if it forecasts greater profits from protesting than from not protesting. In terms of expected benefits, "[p]rotesters … care about two … questions: how difficult is it … to win, and does winning a protest bring any meaningful relief" (Gordon, 2006, p. 10). The latter question relates the magnitude of the award from winning a protest, X_A. The first question is slightly more involved in that it requires two steps.

As indicated above, in order to be successful, a protest must first be determined to have merit (with probability P_M) before it can be decided by the GAO. Then, given that it has merit, it must be sustained (the conditional probability P_S). "Where the protest survives initial screening, the critical question … will be the standard of proof that must be met [to] sustain the protest" (Gordon, 2006, p. 10).

A recent RAND study discovered that a total of 836 protests were filed with the GAO against the USAF over the period FY2000–FY2008. Only 201 were found to have merit and of those, 29 were sustained (these calculations were based on root B number counts derived from PACTS, Camm et al., 2009, p. 6). Based on this USAF data, less than 25% of protests filed were found to have merit. The probability (relative frequency) that a protest has merit is P_M = 201/836 = 0.24 = 24%. Of those 201 protests found to have merit, less than 15% were sustained. The conditional probability that a protest will be sustained given that it has merit is P_S = 29/201 = 0.144 = 14%. These probabilities (relative frequencies) can be used by a representative bidder interested in competing for an Air Force contract simply by inserting them into a decision tree like the one in Figure 5.

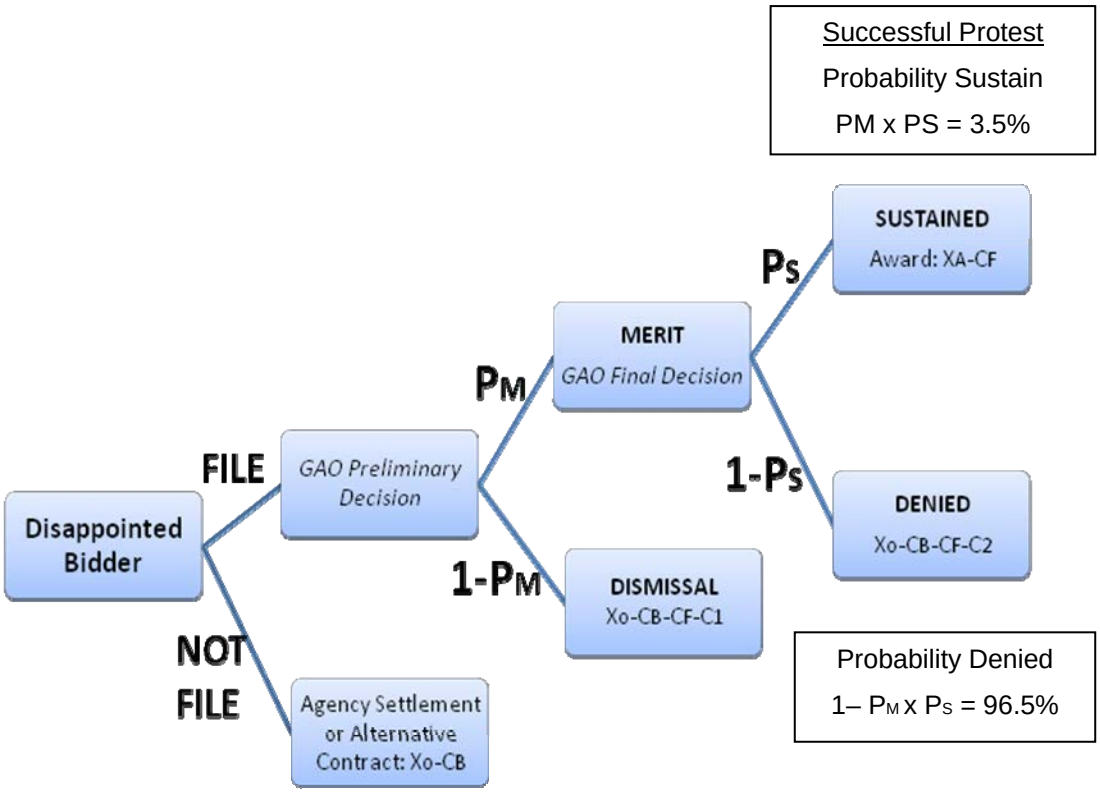

Figure 5. A Disappointed Bidder Decision Tree

Data for the period FY2001–2008 is presented in Table 4 for the Department of Defense (DoD) as a whole. The conditional probability that a protest will be sustained, P_S, appears in the fifth row in Figure 9 and is called the *DoD Sustain Rate*.

Table 4. Protests Filed with the GAO against DoD Procurements
(JAT, 2009, p. 9)

	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08
DoD Cases Closed (B-Nbrs)	603 (60%)	680 (65%)	704 (62%)	731 (56%)	706 (58%)	739 (60%)	775 (62%)	838 (58%)
DoD Merit (Sustain + Deny Decisions) (B-Nbrs)	174	157	184	213	154	151	200	153
DoD # of Sustains (B-Nbrs)	40	22	32	36	28	38	62	30
DoD # of Sustains (Procurements)	N/A	15	19	14	17	21	19	11
DoD Sustain Rate (B-Nbrs)	23%	14%	17%	17%	18%	25%	31%	20%
DoD Competitive Actions	256,946	376,606	460,528	549,679	1,174,786	1,099,142	1,092,434	1,176,913
DoD Competitive Dollars	$83.3B	$101B (up 21%)	$122.7B (up 21%)	$138.6B (up 13%)	$168.3B (up 21%)	$184.7B (up 10%)	$205.4B (up 11%)	$251.1B (up 22%)

- Percentages shown for DoD Cases Closed represent DoD percentage of the total GAO cases closed based on CRS Report data (www.gao.gov)
- DoD Procurements represent actual number of solicitations associated with B #s as reported by GAO
- DoD Sustain Rate calculated by dividing DoD sustained B #s by Merit Decisions
- N/A = Data Not Available
- DoD Competitive Actions and Dollars percentage variations are only in relation to the previous year
- Competitive Actions/Dollars does not include DECA (Source: FPDS-NG)

This data indicates that in the most recent year of the sample (FY2008), for all of the DoD, P_S = 0.20. In other words, only 20% of the protests found to have merit were subsequently sustained. An investment in transparency by publishing merit and sustain rates might pay for itself through a reduction in the rate of protests if it serves as a deterrent to disappointed bidders who might otherwise be tempted to protest due to an optimism bias.[82]

[82] Note that if companies use protests as a strategic bargaining/negotiating tool to extract concessions from procurement agencies (Fed-mail or Buy-offs), then they will not be easily deterred

C. Expected Benefits of Winning a Protest and Expected Costs of Losing

There is only one way a disappointed bidder can win a protest: the protest must have merit and be sustained given that it has merit. In calculating its expected benefits from filing and winning a protest, a contractor multiplies the (tiny) probability that its protest is sustained (i.e., the probability that the protest has merit times the probability that it is sustained, given that it has merit, or P_M x P_S = 24% x 14.4% = 3.5% = 29/836), by the value of the award, X_A for example, see Figure 5).

However, deducted from the award, a firm must subtract its overall bidding costs (C_B) and any filing fees (C_F), and anticipate whatever costs it decides to invest to conduct the protest (I). In general, the expected value of winning a protest to a firm that loses the competition is as follows:

$$\text{Expected Benefit of Winning} = (P_M \times P_S) \times [X_A - C_B - C_F - I] \qquad (1)$$

While there is only one way the disappointed bidder can win a protest—the protest must have merit (P_M = 0.24) and must be sustained given that it has merit (P_S = 0.144)—there are two ways it can lose the protest: (i) if the protest is dismissed, with probability (1 - P_M) = 0.76, or (ii) if the protest has merit but is subsequently denied, perhaps due to lack of prejudice, with probability P_M (1 - P_S) = 0.76 x 0.86 = 0.65. Therefore, a disappointed bidder's expected cost calculation includes two components, or two ways to lose a protest.

In the event that a bidder loses the protest, the value of the next-best alternative project (or agency settlements) is given by *Xo*. This is offset by the usual suspects (bidding costs, filing costs, and any protest-related investments the firm lost in the current competition). We add possible penalties, C_1, in the event the protest is found to be without merit (e.g., dismissed as frivolous), and C_2, in the

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by evidence that the large majority of protests are found to be without merit, and that the majority of those with merit are not sustained.

event the protest has merit but is ultimately denied.[83] In general, the expected value of losing the protest to a firm that loses the competition is given by the following equation:

$$\text{Expected Cost of Losing} = (1 - P_M)\,[Xo - C_B - C_F - I - C_1] + P_M(1 - P_S)[Xo - C_B - C_F - I - C_2] \quad (2)$$

The first term represents the protest being dismissed and the second represents the protest being denied. A streamlined version of a representative disappointed bidder's protest decision of whether to file a protest is illustrated in Figure 5.

D. Strategies to Reduce Protests

As mentioned in Section II, reducing protests can be accomplished in two ways: by reducing the expected benefits of winning a protest, shown in Equation 1, or by increasing the expected costs, shown in Equation 2. Equation 1 demonstrates that reducing the expected benefits of filing a protest could be accomplished by reducing awards/payoffs in the event that protests are sustained, X_A, or by increasing filing fees (and/or other related expenses), C_F. Reducing the expected benefits of a protest could also be accomplished by reducing the probability that a protest has merit, P_M, or that it is sustained given that it has merit, P_S.

The probability a protest has merit, P_M, is likely to be positively correlated with agency errors, E, and fraud, F. So, if $P_M = P_M(E, F)$, then any investment (efforts/initiatives) to reduce fraud or errors will reduce the probability a protest has merit and the expected benefits of a protest.

Similarly, we can assume that the probability a protest is sustained given that it has merit (or corrective action is taken), P_S, is positively correlated with fraud and

[83] There is precedent for quantifying the latter cost in that the COFC Rule 65 requires a disappointed bidder to post a bond that it loses in the event that its protest is ultimately denied.

errors as well as correlated with the amount of protest-related investments made by the firm, *I*, and the quality (technical) measure of effectiveness that the firm offers in its bid proposal, *MOE*. However, it is assumed this probability is inversely correlated with the contract bid price offered by the firm, *P*. *Ceteris paribus*, the higher the price offered by the firm relative to its competitors, the less likely a protest will be sustained given that it has merit, such that $P_S = P_S(E,F,I,MOE,P)$.[84]

Since *I*, *MOE*, and *P* are all contractor decision variables, the government's attempt to reduce the probability that a protest is sustained given that it has merit is once again left with investments (efforts/initiatives) to reduce fraud or errors.

Equation 2 shows that increasing the expected costs could be accomplished with similar actions and initiatives, but it also includes the possibility of assessing penalties (or increasing costs), C_1 and C_2, or somehow raising the value of the next-best alternative, *Xo* (possibly by unbundling the contract or with shared procurements, i.e., split buys).

E. A Representative Bidder Model

The protest problem just discussed is actually a piece of a bigger profit maximization problem, that any representative bidder/offeror faces upon entering a competition for a government contract.[85] The representative bidder model described below allows for a more detailed examination of this problem.

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[84] It seems reasonable to assume that the lower the quality (*MOE*) and the higher the price (*P*) a firm offers, the less likely it is to be prejudiced (or the lower its chance of winning the competition), and, therefore, the lower the probability that the GAO will sustain a protest given that it has merit.

[85] Developing the broader problem could offer important new insights. For example, suppose the government decided to raise filing fees (C_F), assess penalties if a protest is summarily dismissed as frivolous (i.e., cost, C_1), or impose a "loser pays" penalty if a protest is ultimately denied (i.e., cost, C_2) in order to raise protest costs and limit the number of protests (i.e., demand curves slope down). The broader representative bidder model might reveal that bid prices, *P*, offered by representative bidders would tend to increase, so that we might discover that some of the cost is ultimately shifted back onto the government as higher acquisition costs.

Fortunately, the expected benefits of winning a protest, shown in Equation 1, and the expected costs of losing a protest, shown in Equation 2, are major components of the representative bidder's profit function. In fact, a representative bidder's total expected profits, V, consist of only two additional components. The first is the expected value of winning the competition and the second is the expected value of losing the competition.

The probability that a representative bidder wins the competition, P_W, is assumed to be negatively correlated with the price it offers (P), any agency fraud (F), or errors (E) and with the number of bidders (N), but positively correlated with the quality (technical) measure of effectiveness it offers (MOE), such that $P_W = P_W(P,E,F,N,MOE)$. Assuming the government requires a fixed quantity, Q (e.g., 179 KC-X aerial tanker refuelers), the representative bidder's problem involves choosing a price (P), quality/schedule (MOE), and how much to invest in post-award, protest-related expenditures (I) in order to maximize its total profit function (V), where

V = the expected value of winning the competition,

+ the expected value of losing the competition,

+ the expected benefit of losing the competition but winning the protest,

+ the expected cost of losing the competition and losing the protest.

Because Equation 1 is the expression for winning the protest and Equation 2 for losing the protest, there are only two missing components in the profit function.

The first is the expected value of winning the competition, say $E(W)$. This is simply the probability of winning the competition (P_W) multiplied by the payoff from winning. The payoff includes the award of the contract (revenues P x Q), minus production costs (total costs $C(Q,MOE)$), minus the costs of participating in the bid and proposal process (C_B), minus any expected costs of having to defend the

contract award (C_3).[86] The expected value of winning the competition is given by the following equation:

$$E(W) = P_W [PQ - C(Q,MOE) - C_B - C_3]. \quad (3)$$

The second missing component in the representative bidder's profit function is the expected value of losing the competition, say $E(L)$. This is simply the probability of losing the competition (one minus the probability of winning), multiplied by the next-best alternative project, Xo, minus the bid and proposal costs, C_B, such that

$$E(L) = (1 - P_W)[Xo - C_B]. \quad (4)$$

[86] As discussed earlier, the expected costs of defending the contract award can be critical to the decision of whether or not a winning bidder type decides to participate. The easier it is to file a protest (i.e., the lower the filing costs) and the greater the probability of winning the protest (P_M x P_S), the more that losing bidder types will be attracted, but the less that winning bidder types will show up (or else charge a stiff risk premium).

Combining Equations (1)–(4) yields a representative bidder's profit function, *V*. The bidder's problem is to choose a price to charge (*P*), the quality/schedule to offer (*MOE*), and a prospective protest investment (*I*) to

$$\text{Maximize } V = P_W [PQ - C(Q,MOE) - C_B - C_3] \quad \text{(winning the competition)}$$

$$+ (1 - P_W) [Xo - C_B] \quad \text{(losing the competition)}$$

$$+ (P_M P_S) [X_A - C_B - C_F - I] \quad \text{(winning the protest)}$$

$$+ (1 - P_M) [Xo - C_B - C_F - I - C_1] + P_M(1 - P_S) [Xo - C_B - C_F - I - C_2] \quad \text{(losing the protest)}$$

Given this profit function, the first order conditions of an unconstrained optimization allow us to generate some intuitive comparative statics results. Applying the Envelope Theorem reveals the impact of changes in the variables on a representative bidder's expected profits for several of the variables. A summary of these results is provided in Table 5, and a discussion appears below.

Table 5. Comparative Static Results of the Variables on Expected Profits

Variables the Department might Influence:	*E* errors	*F* fraud	*N* bidders	*XA* protest award	*CB* bid & proposal costs	*C1*;*C2* penalties for frivolous or loser pays	*CF* filing fees & other protest costs	*Q* quantity required	*Xo* Value of Alternative Projects
Impact of an Increase on Expected Profits	?	?	-	+	-	-	-	+	+

The greater the number of bidders, bid and proposal costs, penalties, or filing fees, the *lower* the expected value of profits to a representative bidder from the competition (*V*). The greater the protest award, quantity of the contract, or value of alternative projects, the *greater* the expected value of profits to a representative bidder from the competition (*V*).

An interpretation of the representative bidder model points to several of the potential change candidates discussed earlier. Bidders control the price they charge (*P*), the quality/schedule they offer (*MOE*), and any investment they might make to

win a protest (*I*), so the government controls the remaining variables that appear in Figure 10.

1. Reducing Expected Benefits

To reduce expected benefits, the first step is to identify feasible ways to lower the probability of successful protests. This involves reducing agency errors (*E*), and fraud and favoritism (*F*). This can be accomplished by (i) investing in training and experience, (ii) linking pay and promotion to successful procurement outcomes, (iii) ensuring the transparency of the assessment criteria, (iv) ensuring the transparency and accountability of the evaluation and selection process, (v) making companies aware of the low probability of awards being overturned, and (vi) substituting protests for alternatives such as random (internal and external) audits and investigations, encouraging alternative dispute resolution (ADR), etc. Alternatively, the probability of success would drop if the GAO narrowed standing (i.e., eligibility) or raised the threshold required for a protest to have merit.

Whistle-blower lawsuits and integrity pacts are examples of decentralized third-party governance mechanisms. Internal audits, external audits, alternative dispute resolution (ADR), and IG investigations are examples of centralized oversight mechanisms. Centralized and decentralized oversight mechanisms can be either complements or substitutes for protests, but regardless, by deterring fraud and errors, they will lower the probability of a successful protest.

Similarly, carefully crafted human capital investments (such as improving public-sector pay and training for procurement officials) can also substitute for more costly centralized and decentralized oversight. Valuable human capital investments include initiatives to build integrity (e.g., ethics training, clearly stated and widely distributed standards of conduct, etc.), acquisition training (e.g., augmenting skills and experience), and pay for performance (or other ways to align incentives to improve procurement outcomes). Internal audits, external audits, investigations, sanctions, and penalties offer other approaches—all of which represent attempts to

increase transparency and accountability. In combination, these investments offer a potential return in terms of reduced fraud and errors that is reflected in a lower probability of a successful protest. Investing in training, linking pay and promotion to successful procurement outcomes, and hiring more experienced acquisition personnel will reduce protests and simultaneously build confidence in the integrity of the solicitation and selection process, boosting the expected benefits of participation and therefore the benefits of competition.

The second step is to identify feasible ways to reduce the payoff from a successful protest. For example, by (i) reducing the award (such as by unbundling the contract vertically, in terms of different stages of production, or horizontally, in terms of quantities); (ii) sharing the award (split buys); or (iii) keeping records of protests by firms and using this information in future competitions (i.e., using a company's reputation), etc.

2. Increasing Expected Costs

To increase the expected costs of a protest requires increasing either the probability of losing a protest or the negative payoff associated with losing the protest (or both). Strategies might include (i) restricting the filing window or raising filing fees to reflect the government's (agency and GAO) complete (visible and hidden) costs to administer a protest (C_F), (ii) requiring firms to post a bond (as in the case of the COFC) to compensate for delays in the event the protest is denied, or (iii) assessing penalties for clearly strategic (frivolous/nuisance) protests and/or for those that have some merit, but are not sustained, e.g., loser pays, corresponding to penalties (C_1, C_2). In Figure 5.

In lowering the expected benefits from a protest or in raising the expected costs, the challenge is to choose the most cost-effective portfolio of initiatives that aligns incentives and that adequately monitors and enforces procurements in order to reduce the risk of fraud and errors and to encourage competition. In searching for alternative approaches, the optimum mix will include targeted investments in human

capital as well as centralized (audits and investigations) and decentralized (bid protests) third-party governance mechanisms.

F. An Application of the Model: The KC-X Procurement

An excellent illustration of the powerful role of incentives in the protest process is the USAF's search for a new aerial tanker to replace the KC-135 fleet. The two qualified bidders (Boeing and Northrop Grumman–EADS [NG–EADS]) both offered mature designs. Yet procurement efforts have been consistently disappointing. In this case, the usual explanation of insufficient technical maturity is not an excuse. Both candidates (the KC-767 and KC-30) have been developed for other air forces, have been successfully delivered (deployed), and are currently operational. The breakdown has been in the conduct of the U.S. competition.

Boeing's 2008 protest of the KC-45 contract award to Northrop Grumman–Eads (the KC-30 proposal) was a serious obstacle in finding a supplier for the next USAF aerial tanker. As illustrated in the representative bidder model in Figure 5 above, the decision to protest is influenced by a number of factors—especially (a) the probability of a successful protest (i.e., the probability of merit, and the probability the protest is sustained given that it has merit), (b) the expected return (or payoff) from a successful protest, (c) the cost of conducting a protest (i.e., filing fees and other expenses, including opportunity costs of the assets committed), and (d) the value of the next-best alternative project available to the firm.

When there are only two potential KC-X suppliers, this encourages the strategic use of protests by firms as a bargaining tool. For example, either firm can hold up the procurement process to gain strategic advantage by issuing a threat not to respond to the Request for Proposal (RFP)—i.e., threatening to leave the DoD with a non-competitive procurement that violates the spirit of the CICA. In fact, both Boeing and NG–EADS have successfully used similar hold-up strategies. In one instance in 2007, the RFP was amended. In another instance in 2008, the post-

protest attempt to re-compete the KC-X contract award was aborted. The latest twist in 2010 is that one of the candidates threatened not to respond to the RFP.

It might appear that it should be possible to write an RFP acceptable to both suppliers that would result in a competition less vulnerable to protest. Unfortunately, the RFP "fairness" constraint likely interferes with the aim of conducting a protest-resistant source selection process.[87]

Although it may be useful to aspire, as the Air Force Chief of Staff has said, to a "bulletproof" RFP (Gnau, 2009) and a "perfecto" competition (Bennett, 2009)—with a view to lowering the probability of a successful protest—this is only part of the story. The other part is to understand the overwhelming incentives created by the extraordinary benefits (payoff) of the KC-X contract. The magnitude of the contract strongly encourages either company to protest not being selected even if there's only a slight chance of success. At the DoD's insistence, and with presidential support, the KC-X competition was specifically designed to award a large, long-term, winner-take-all contract. The unintended consequence has been a strong incentive for the losing firm to protest the award—even if that protest is unlikely to succeed.

The losing firm's upside is the expected return from overturning the award, in this case, a historically unprecedented award to the winning firm—a revenue stream estimated at up to $100 billion over the life of the tanker contract (e.g., see Johnsson, 2009). A successful protest is likely to result in an amended competition (or in an entirely new competition). Given only two serious competitors, the chances of winning a new competition are potentially much greater than if multiple firms were in competition. In this case, the chance (small probability) of an enormous payoff virtually guarantees protests unless artificial limits (quotas) are imposed on the ability to protest (similar to the limited number of reviews allowed on line calls by players in professional tennis).

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[87] This merits further study.

Reinforcing the incentives for the two companies to protest are their calculations of the expected costs of conducting a protest relative to the expected benefits. The costs include (i) legal and other related pecuniary costs (filing fees, etc.), and (ii) opportunity costs of distracting the company from other possible pursuits and of preserving the management team and technical experts organized for the original competition.

In the case of the KC-X, protest costs are trivial relative to the size of the contract (and potential profits). Moreover, the opportunity costs of keeping the management and technical teams together are likewise relatively small. These opportunity costs include the loss of opportunities to use that team to compete for other business. In this case, the losing bidder is very likely to be forced out of the new tanker market for well over a decade, suggesting that regardless of other opportunities, the team's opportunity costs of pursuing the contract will be relatively small.

In short, even if the USAF was able to take significant steps to reduce the probability of a successful protest, or to substantially raise the costs of a protest, the potential payoff is so large that either firm would still face positive net expected benefits from protesting if they lost the competition. But there's more to the situation. If the award is re-competed and that competition turns out badly, multiple protests are still possible; that is, it's possible to once again overturn the award (as in the case of the CSAR-X). Moreover, if the GAO does not return a favorable verdict, then it is possible for the protester to have a second chance at protesting the award at the Court of Federal Claims (COFC) and to be successful there (similar to the case of the KC-135 support contract).[88]

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[88] This suggests investigating alternate strategies of dealing with the dispute before it takes off. For instance, Boeing's supporters in Congress used the GAO sustainment of Boeing's protests in 2008 as the occasion to conduct hearings on pre-award issues such as whether USAF solicitation criteria properly took into account defense industrial base impacts and foreign subsidies for the Northrop Grumman–EADS team. The Air Force subsequently cancelled the protested solicitation altogether.

In this case, it appears the only real solutions to the problem are: to reduce the expected benefits (i.e., the payoff) from protests (including from the automatic stay of the procurement), to limit the grounds or number of protests allowed (which could be ruled unconstitutional), to require offerors to engage in ADR, and/or to manage the protest process in ways that ensure protesters do not obtain pre-award re-competition remedies with post-award arguments (e.g., by refusing to follow the GAO recommendation).

Intense competition by a limited set of suppliers over relatively few major defense contracts provides a good business case for a losing bidder to protest even when the probability of success is quite small. Since the value of the contract is one of the few variables the Department controls, this suggests investigating alternative approaches to reduce the size of the contract, or else accepting the likelihood of persistent protests which further delay procurements. Strategies might include unbundling the contract to reduce the payoff or sharing the contract (a split buy). ADR is particularly conducive to reaching a split buy outcome.

The split-buy option can be combined with a clever incentive mechanism to preserve competition over time. This study recommends that the split depend on the relative value of the contract offers, with the winner receiving a larger split (i.e., share of the procurement), the greater the difference between the highest and second-highest valued contractor. For example, if the second-best offer is close enough to the first-best offer, the contract split would be close to 50:50. If structured correctly, such a split strategy has the potential to retain the benefits of competition. It encourages contractors to submit proposals that reflect what they view as the best value they can provide to the government so that they obtain the largest possible share of the contract. Contract shares could be adjusted over time to reward contract performance as contractors invest in cost-reducing technologies or experience different learning curves. Split buys also increase competition for follow-on contracts by preserving multiple procurement sources. This offers a constructive approach to discourage costly bid protests and deserves more careful consideration.

Many of the challenges associated with bid protests in the KC-X procurement are, in a very real sense, a natural outcome of DoD policies. Secretary of Defense William Perry's "last supper" meeting with the CEOs of major defense companies after the end of the Cold War (and demise of the Soviet Union) facilitated a significant consolidation of the American defense industrial base. An unintended consequence of reducing the number of bidders may have been to make the procurement of major complex weapons systems more prone to protests. Large, winner-take-all competitions have also created strong incentives to protest contract awards.

The KC-X tanker competition illustrates another problem related to bid protests: missed opportunities to manage the GAO protest process in ways that are allowed under current protest regulations. Protesters such as Boeing can exploit agency errors and missed opportunities by pursuing post-award protests in order to obtain a pre-award remedy—for example, a new, "start-from-scratch" competition (which imposes delays that are in the protestor's interest). The Air Force could have reduced the likelihood of this outcome by using early alternative dispute resolution forums, issuing stay overrides, or by refusing to follow GAO recommendations in whole or in part.[89]

Finally, bid protests are best viewed as part of a larger strategic game, which. includes possible efforts by competitors to re-shape RFPs (to influence the executive branch), to engage in award protests (to achieve success at the GAO, part of the legislative branch), to pursue litigation in federal courts (to achieve success through the judicial branch), and to lobby members of Congress. In the latter case, stretching out the procurement process through protests, and other litigation, affords time to mobilize political support—particularly for high-stakes awards (like the KC-X).

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[89] Potential strategies and tools for expeditious and less costly resolution of protests are addressed in the companion report by Benishek et al (2011).

Indeed, both Boeing and NG–EADS have been very successful in mobilizing special interests to build strong support in Congress for their respective proposals.

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IV. Summary and Selected Recommendations

The goal of this study was to offer senior decision-makers a useful framework and perspective to evaluate, articulate, and recommend modifications of the government's bid protest policy to improve procurement outcomes. A key contribution is to add an economics dimension to a process mostly thought of in legal terms.

The legal and regulatory literature that underpins the current protest system reflects two fundamental beliefs: Protests (a) deter fraud and errors in government procurements and (b) promote competition. This study explored the first premise through the economist's principal-agent framework and the second with the aid of a representative bidder model. The aim was to examine opportunities to improve the efficiency and effectiveness of the protest process in order to enhance performance, cost, and schedule outcomes of Defense Department acquisition investments.

In economics, there is no such thing as a free lunch. Operating a protest system is costly. A fundamental challenge identified by the Defense Department is the significant costs of protests to the department, which is reflected in the recent experience of selecting a vendor for the Air Force's KC-X aerial tanker.

Along with the well-documented benefits of allowing firms to protest public procurements come significant opportunity and transaction costs. The challenge is to reduce the risk of protests of critical acquisitions that result in significant cost overruns, schedule delays, and performance gaps, while preserving the benefits offered by protests to promote competition and ensure the integrity, transparency, and accountability of the procurement process.

Adopting an economics perspective reveals two other crucial insights: first, protests can be exploited by firms as a strategic bargaining tool (Fed-mail); and second, governments can overreact in attempts to achieve protest-proof procurements (or, alternatively, exhibit tacit consent to protests—buy-offs). These

hidden costs significantly impact acquisitions. Combined, they substantially increase risks of delays and cost-overruns.

Fortunately, fighting agency errors and corruption and promoting competition can be done in other ways. The economics approach encourages senior leadership to identify and evaluate alternatives to protests that could achieve similar results at a lower cost. The importance of acknowledging the substantial costs of operating a protest system to govern procurement and encourage competition is one of the key insights of the study: There exists an optimum rate of protests. The optimum rate of protests offers the most efficient and effective way to encourage competition and ensure the integrity of the acquisition process while guaranteeing the best possible outcomes for our troops and taxpayers.

Although it is not easy to locate this optimum, the economics approach can help identify and evaluate policies that move us closer to the optimum. One important implication is that a simple, often-stated objective such as “reducing the rate of successful protests” is not always appropriate. Two additional factors need to be considered. The first is to identify where the department is relative to the optimum. The second involves a careful consideration of how the department might choose to reduce protests. In recognizing the costs as well as benefits of a protest system, the economics approach suggests that reviewing portfolios of governance mechanisms (internal audits, external audits, independent investigations, ADR, integrity pacts, training, incentives, etc.) can substitute for (or complement) protests to improve procurement outcomes.

If the Defense Department is facing protests above the optimum rate , then the burden outweighs the benefits and reducing the rate of protests is appropriate. This can be accomplished in two ways: by reducing the expected benefits of a protest to a disappointed bidder or by increasing the expected costs. This is a crucial distinction emphasized throughout the study.

If the Defense Department is below the optimum rate, then the benefits of protests outweigh the extra (opportunity and transaction) costs. In this range, while reducing protests might appear to have positive short-run impacts, it could be at the expense of long-term benefits such as preserving the integrity of the procurement process and could sacrifice future competition. Remarkably, this report revealed two important cases that demonstrated that even in this range, it is possible to reduce protests and improve long-term outcomes. The key is to carefully consider *how* the department reduces protests.

This study captured insights from the protest literature and offered a brief overview of the current protest process; it also discussed alternative governance mechanisms. Woven throughout were data, examples, and survey results. Two economic frameworks were introduced—the principal-agent model (agency theory) and a representative bidder model. These frameworks revealed two sets of potential change candidates—factors that reduce the expected benefits to a losing bidder of a protest and factors that raise the expected costs.

In conclusion, many countries allow disappointed bidders to protest public procurements as an oversight mechanism to minimize fraud and errors by procurement officials. The belief is that allowing disappointed bidders to protest increases integrity, transparency, and accountability, and encourages competition, reducing the cost of public purchases. A key contribution of this study is to add an economics dimension to a protest process mostly thought of in legal terms. The economics approach suggests companies are likely to use the protest process strategically to improve their competitive bargaining position and will be equally strategic in their decision to protest an award. The goal for governments is to minimize the risk of protests that result in cost overruns, schedule delays, and performance gaps, while preserving benefits offered by protests to promote competition and ensure the integrity, transparency and accountability of the procurement process. Adopting an economics perspective reveals two other crucial insights: firms can exploit protests to extract concessions (Fed-mail), and risk-averse

governments can overreact in their attempts to achieve protest-proof procurements (buy-offs). In recognizing the costs as well as the benefits of a protest system, the economics approach invites a review of alternative portfolios of governance mechanisms that complement bid protests to improve procurement outcomes.

V. Appendix 1: Selected Observations and Recommendations

According to Francis, Golden, and Woods (2010),

> In Fiscal year 2009, the DoD spent nearly $384 billion on contracts for goods and services, … representing over 70 percent of total government contract spending. [This] makes it imperative for DoD to manage risk in all of its acquisitions to ensure that the government's best interests are being met. … Clearly however, DoD has not adequately managed such risks. For example, its major weapons systems continue to take longer to develop, cost more, and deliver fewer quantities and capabilities than originally planned. (p. 1)

A question is whether the GAO or the agencies themselves might be inadvertently contributing to some of these challenges through the bid protest oversight process.

> Poorly defined or changing requirements have contributed to increased costs, as well as services that did not meet the department's needs (p. 4). …
>
> Recently, DoD established a multiphased, peer-review process for services acquisitions intended to ensure consistent and appropriate implementation of policy and regulations, improve the quality of contracting processes, and facilitate sharing best practices and lessons learned (p. 5). …
>
> One of the principal tools for ensuring the integrity of the competition system is the bid protest process. … [W]hen viewed historically, … the number of protests challenging contract awards in the last 5 years is relatively low. … The bid protest process involves a legal, adjudicative function; both the process and the resulting product differ from those associated with the reports that GAO issues in connection with its program audits and reviews (p. 9). …
>
> [A] protest before GAO … does not address broad programmatic issues, such as whether or not a weapons program is being managed effectively or consistent with best practices. Our decision … reaches no conclusion about which of the offered goods or services will best meet the agency's needs. [EXCEPT FOR DETERMINING PREJUDICE] Instead, a bid protest decision addresses specific allegations raised by an unsuccessful offeror challenging particular procurement actions … contrary to procurement laws, regulations, or the evaluation scheme set forth in the solicitation." We sustain a protest when we find that the contracting agency has not complied with procurement laws, regulations, or the solicitation's evaluation scheme, and that this error

prejudiced the protester's chances of winning the competition for the contract. Evaluating offerors in a manner consistent with the solicitation's stated ground rules is a requirement for conducting an impartial and objective procurement (p. 10). …

[T]here are other reasons why GAO might sustain a protest. For example, an agency's evaluation may not be adequately documented, or the evaluation conclusions may not be supported by the record. An agency also may have conducted inadequate or misleading discussions, or evaluated offeror's proposals in a disparate manner (p. 11). …

GAO's bid protest process reduces potential disruptions to DoD procurements as a result of three factors: (1) GAO consistently closes more than 50 percent of all protests … within 30 days of filing; (2) remaining DoD protests must be, and are, resolved with 100 days; … (3) CICA permits agencies to proceed with contract performance even before a protest is resolved when the goods or services are urgently needed, or when proceeding is in the best interests of the U.S. (p. 11). …

In short, while there are challenges associated with balancing competing interests inherent in the protest system, public bid protest decisions … [provide] transparency in the procurement system and guidance to the procurement community, without undue disruption to the acquisition process (p. 12). …

The President's March 4, 2009, memorandum … addresses the need for improvement in the procurement system. … [T]he administration has tasked agencies with making measurable improvements in four key areas: (1) increasing competition, (2) reducing the use of high-risk contracting approaches, (3) improving the acquisition workforce, (4) determining the appropriate use of contractors versus federal employees (p. 12). …

There has been a substantial increase in spending on acquisition programs and services, while the number of civilian and military personnel in DoD's acquisition workforce has remained relatively constant, … workforce shortfalls have resulted in degradation of oversight … and increased workloads for existing staff. To supplement its … acquisition workforce, DoD relies heavily on contractor personnel. … Without an adequate workforce … there is an increased risk of poor acquisition outcomes and vulnerability to fraud, waste, and abuse (p. 15). …

[DoD] is conducting a competency assessment to identify the skill sets of its current in-house acquisition workforce and increasing the size of its acquisition workforce (p. 16).

> The FY 2011 budget includes $864 million in RDT&E for developing a new generation tanker, which remains a very high priority. Initial plans call for procuring 179 commercial-derivative tanker aircraft to replace roughly a third of the current aerial refueling tanker fleet at a projected cost of $35 billion (DoD, 2010, p. 5) …
>
> To make the most of the nation's resources entrusted to the DoD and to carry out its mission more effectively, the Department continues striving to improve the way it does business (p. 6). …
>
> A critical effort involves reforming the processes by which we buy weapons and other important systems through implementation of the Weapon System Acquisition Reform Act. … [The] Department is increasing the number of acquisition personnel by 20,000. … The FY 2011 budget request continues support for this transition and includes funds for training and retention programs that will bolster the capability and size of the acquisition workforce. (p. 6) …

A. Common Bases for Protests

In a January 2009 report, the USAF published the most common grounds for filing a protest that it sees: "The most common bases for protest are: ***improper evaluation of proposals, defective solicitations, improper cancellations of solicitations, failure to properly compete acquisitions, and failure to properly implement socio-economic goals*** (e.g., small business set asides)" (USAF, 2009 p. 8). These causes for protest are often based on rules the USAF introduces in its Requests for Proposals (RFPs) and that, in some cases, it does not follow.

Several complaints (bid protests) might appear under a general heading that might be called *errors* (*E* in the model): According to recent studies (JAT, 2009; Gansler, Lucyshyn, & Arendt, 2009), the most common errors involve the following:

i) **Defective Solicitations:** These often take the form of poorly constructed RFPs, usually through omitted information or contradictions within the solicitation. It does not necessarily deal with how the agency evaluated competitors for the contract, but rather how the agency solicited bidders and how it constructed the requirements for the desired goods or services (*E*).

ii) **Improper Evaluations:** The improper evaluation of proposals can take several different forms, including unequal cost evaluations, relative weights, or technical evaluation factors. The common factor in improper evaluation claims is that the protestor felt the government agency violated at least one procurement regulation and, as a result, prejudiced the protesting company (*E*).

iii) **Improper Cancellations:** Claims of improper cancellation of a solicitation often occur after an agency solicits bidders for a contract and then cancels the RFP because of a shift in demand (perhaps due to changes in the battlefield), or in an effort to conserve valuable government resources for higher priority projects (*E*).

Defective solicitations and improper cancellations boil down to the government not offering the solicitation to the right competitors. Either it did not consider a legitimate competitor based on reputation or on some other factor, or it may have violated small-business regulations by offering the solicitation to ineligible competitors based on their size (*E*).

Another common reason (error) for filing a protest—aside from improprieties in the evaluation, in the RFP, or in source selection—is the failure to conduct fair and meaningful discussions with competitors (SSJAT, 2009, pp. 9–10). During the contracting process, the agency representative must treat all competitors fairly and impartially. If an agency is found to have conducted unfair discussions with a competitor (such as only contacting one competitor or revealing evaluation information to one competitor but not to all that could give an unfair advantage [fraud]), the award of contract will likely be protested (*E* for error and *F* for fraud in the model).

B. Recent Increase in the Number of Protests Filed

Based on the information in a 2009 GAO report to Congress (p. 7), the number of DoD protests filed increased from 458 in FY2004 to 611 in FY2008 (see Figure 6). This increase in the number of protests filed against DoD agencies may or may not be statistically significant, but it suggests that the number of protests filed

each year against the DoD recently increased.[90] Several potential factors could have contributed to this recent increase in protest filings.

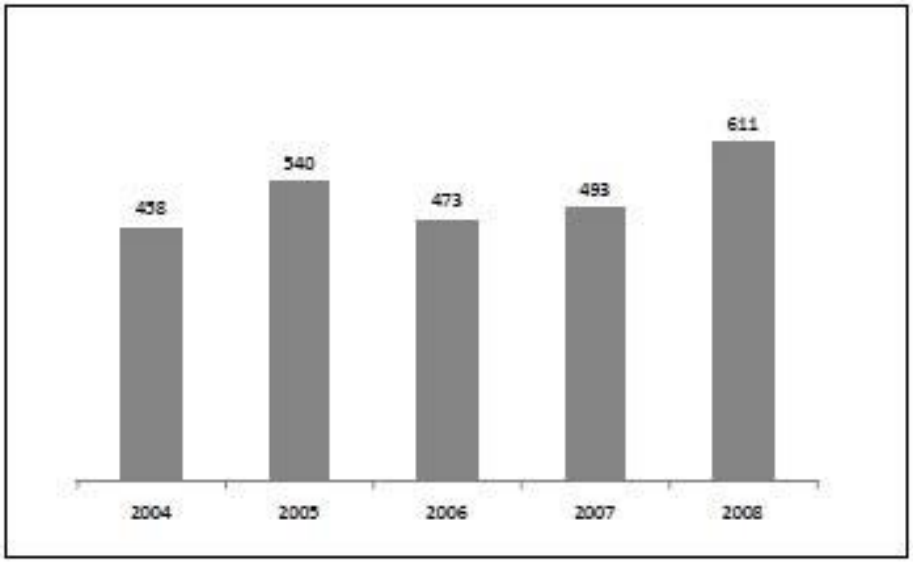


Figure 6. Number of DoD Protests Filed FY2004–FY2008
(GAO, 2009)

First, if the government does not follow its own rules when evaluating competitors' proposals, it will likely see more businesses protesting contracting decisions. This is the simplified reason for why the KC-X protest was sustained (SAF AQ, 15 September 2008, pp. 7–9)—the Air Force did not follow the rules it set forth in the proposal solicitation with regard to performance evaluation weights, cost evaluation methods, and several other self-imposed guidelines. If an agency has trouble following the guidelines that it sets forth in its RFP, then companies will be more likely to protest its evaluations and the award of the contract (*E*).

A second reason for the apparent increase in protests could be the high ops tempo of today's Air Force combined with an overloaded contracting workforce. The United States has been fighting two undeclared wars for almost a decade, which has

[90] Even more interesting for future research is to discover why there was such a significant drop in protests filed at the GAO over the period 1994–2001, as illustrated in Figure 13.

caused an increase in workload for contracting officials. As of FY2008, the average contracting official was responsible for roughly $20 million of taxpayer money (SSJAT, 2009, Slide 22), roughly three times the level of responsibility per worker in FY2001. Since the average worker is now responsible for more taxpayer money than in the past, it is possible that details are being missed on these larger, more complex contracts, which can lead to more protests (*E*).

Another reason for the recent increase in protests is that the government is moving toward larger, less frequent procurements. One example is Alliant, "a 10-year, $50 billion contract that replaces three expiring contracts" (http://www.federaltimes.com/index.php?S=402260) (*XA* and *Xo* in the model).

Because the stakes of winning a contract are high, it is critical for companies to win those contracts to survive financially; it also should be expected that in order to have another shot at the prize, companies who lose a contract will protest if they felt prejudiced (*XA*; *Xo*).

Also, some contracts are only renewed once every several years—for example, the Air Force will not need a new tanker each year, so the winner of that contract will have a guaranteed customer base for a significant period. Companies who win government contracts will have an advantage over their competitors for the life of those contracts, so government contracts are prizes worth fighting for via protest in the event that an opponent is chosen for the award (*XA*; *Xo*).

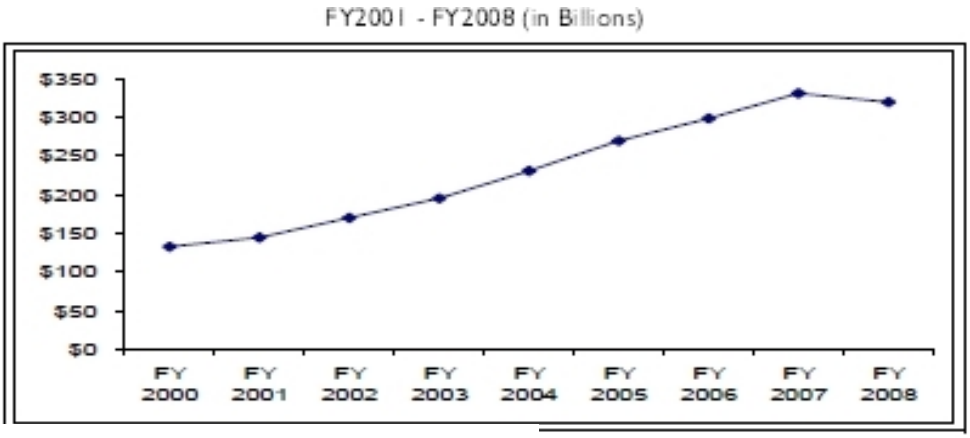
As indicated several times in this report, companies will likely file protests if the expected benefits of filing outweigh the expected costs. Assuming the end goal for any company is to maximize the value to shareholders, the decision to protest in the hopes of being reconsidered for the award of a multimillion dollar contract must

outweigh the cost of filing in addition to the opportunity cost of using those resources elsewhere to increase the odds of winning other contracts.[91]

Another possible contributing factor to the recent increase in protests filed is the increase in DoD procurement spending. As previously mentioned, contractors are responsible for almost three times as many taxpayer dollars today as they were eight years ago. This increased workload can be attributed to increases in defense contract spending over the last decade. From FY2000–FY2008, DoD contract spending increased from $140 billion to $325 billion, as shown in Figure 7 (Schwartz, 2009, p. 16). As the DoD spends more money on contracting by increasing both the number of contracts and the dollar value of those contracts, from the representative bidder model, it follows that as the award (*XA*) increases, the number of contract protests will also increase.[92]

[91] Other costs exist for companies, including possible loss of reputation and future consideration on contracts, but consider for a moment the monetary cost of filing protests. According to Watson & Associates, LLC, a business law practice, the cost of attorney's fees for filing a protest typically average about $4,500. For large companies, this cost is trivial in relation to the potential benefit of winning a multimillion (or billion) dollar protest. However, for smaller businesses, this cost might be significant and could strongly impact a decision of whether to file a protest. This idea could be tested by examining protest data and the net worth of companies that file protests to see if they are positively correlated.

[92] A final contributing factor to the recent increase in the number of protests filed is the increase in GAO jurisdiction on what kinds of cases it can hear. "Congress expanded GAO's jurisdiction in FY2007 to include hearing protests on task orders, A-76 contracts, and Transportation Security Administration contracts" (Schwartz, 2009, p. 7). This statutory expansion of the GAO's bid protest jurisdiction could be linked to the recent increase in bid protest filings.



Source: Schwartz (2009).

Figure 7. DoD Contract Spending, FY2000–FY2008

It is important to note that despite the recent increase in bid protests, the long-run trend is favorable. The number of protests challenging DoD contracts over the last five years is relatively low when examined over the last twenty years. In FY1989, 1,490 protests were filed against the DoD; in FY2008, only 611 protests were filed, a 59% decrease over this twenty-year period (see Figure 8; GAO, 2009, p. 7).

Thus, while the number of protests filed in recent years has seen a relatively small increase, the number of protests filed when viewed historically is less than half of what it was twenty years ago. This suggests that while there are always improvements that can be made, the procurement system seems to be working the way it should be and that it has been improving over the last two decades by reducing the number of protests filed.[93] There is no conclusive evidence that during the last eight years the number of decisions with merit have significantly increased.

[93] Between FY2001 and FY2008 the number of merit decisions for GAO protests stayed relatively constant around 300 decisions. During that same time period, DoD merit decisions stayed constant around 175 decisions (see Figure 9).

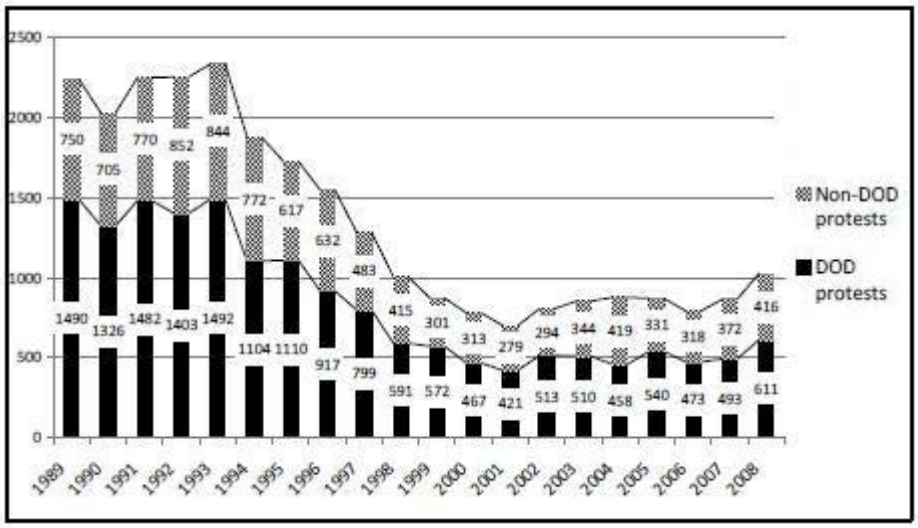


Figure 8. Number of Protests Filed to the GAO, FY1989–FY2008
(GAO, 2009)

The remedy offered in an agency protest can either be monetary (such as paying attorney's fees and/or the cost of filing a protest, as recommended by the GAO in the event of a sustain decision) to compensate the protestor, or can be the voluntary re-solicitation for proposals or reopening of discussions in order to correct the prejudice the agency created. This non-monetary form of compensation costs the agency time, money, and other resources that can delay projects and adversely impact the mission.

Recall the earlier recommendation that the GAO rethink its measure called the effectiveness rate since it can easily incorporate Fed-mail and Buy-offs. Nevertheless, several potential root causes have been identified to explain increases in the effectiveness rate. According to an April 2009 subcommittee report to the Under Secretary of Defense for Acquisition, Technology, and Logistics, five possible root causes explain the increase in effectiveness rates (JAT, 2009, pp. 3–4).

The first cause identified is acquisition complexity. Since FY2001, the number of large cost complex procurements that typically involve performance-based contracts have steadily increased (JAT, 2009, p. 3). Larger and more complex procurements increase the likelihood of mistakes, which is directly

proportional to the number of protests filed. As more protests are filed, more aid will be given to protestors—either through sustain decisions or voluntary aid—which will increase the effectiveness rate.

The second possible root cause for the increase in the effectiveness rate is an increase in ops tempo.

> The number of contract actions being processed including procurements related to urgent operational requirements have grown significantly in the past several years due to enhanced military operations worldwide and associated deployments. This increase in workload makes the procurement process more susceptible to mistakes. (JAT, 2009, p. 3)

This, in turn, leads to an increase in effectiveness rate. The DoD needs quick resolution of protests in order to have the promised goods or services of the contract delivered. As a result, it is possible that the DoD would be inclined to voluntarily give aid to protestors in order to speed the process along to reach a settlement and complete the mission.

Risk aversion is another possible root cause for the increase in the effectiveness rate. "The increase in voluntary corrective actions (including Fed-mail and Buy-offs) may be an indication that DoD activities are less willing to let GAO render a decision that could bring criticism to their agency" (JAT, 2009, p. 3). Litigation risk is a large concern for government agencies because the threat of litigation risks large amounts of valuable resources such as time, money, and manpower. These resources could be put to use elsewhere, so avoiding litigation is ideal. Unfortunately, literature review and survey data in the companion report suggest that agencies are failing to avoid litigation to the extent allowed by current laws and regulations (Benishek et al., 2011, pp. 45–58).

Another factor identified is inadequate manpower due to a large workload.

> Although the total number of contracting personnel remained relatively constant from FY1998 to FY2008, the *workload carried by contracting personnel has grown* significantly, while the average level of *experience has declined*. The increase in workload has undoubtedly resulted in less time

> being available to process individual procurement actions and also suggests the size of the acquisition workforce is inadequate. (JAT, 2009, p. 4).

Over the last ten years, the military has seen an increase in the percentage of the contracting workforce with 0–9 years of experience and 20+ years of experience, while there has been a decrease in the percentage of the group with 10–19 years of experience (see earlier discussion). The middle group is responsible for much of the source selection process, and it is the smallest group proportionally in the entire contracting force. It is possible that civilian contracting agencies and companies are snatching up this middle group as they come to the end of their initial military commitment by offering them better compensation than the military does. This is a cause for concern within the contracting force because with such a large percentage of workers ready for retirement, the Defense Department could conceivably lose many of its experienced workers within a short time period.

Closely related to the problem of inadequate manpower is inadequate training on source selection and the bid protest process. "There is only one formal DAU training course directly focused on proper source selection procedures. This course is not mandatory, offered only online, and fails to capture any of the lessons learned from recent GAO protest decisions" (JAT, 2009, p. 4). This lack of formal training puts Defense Department contracting officials at a disadvantage from the start of their careers because if they are not trained on how to recognize the common contracting pitfalls that often lead to protests, they will not be able to avoid them as easily in the future during the initial stages of the procurement process—ultimately at the cost of future DoD time, money, and manpower.

A final contributor to the increase in the effectiveness rate is the loss of opportunity for the agency to learn from previous procurement mistakes in order to improve its performance in the future.

> There is currently no central repository for protest data or established forums for dialogue on protest related cases and trends in DoD. The GAO does not publish detailed information on cases dismissed after voluntary corrective action or disclose the specific corrective action taken, which makes it very

> difficult to ascertain the nature of the mistakes that were made in these procurements. (JAT, 2009, p. 4)

In the 1980s, once the GAO formally issued a decision resolving a protest or an agency took corrective action, the GAO would write Secretaries of agencies with forward-looking recommendations on improving agency procurements. Further, the GAO would compile and submit those recommendations to Congress in the GAO's annual statutory reports on bid protests.[94] However, "the GAO over time abandoned its statutory responsibility to make recommendations promoting compliance with procurement laws" (Spriggs & Kidalov, 2003). As a result, neither the protesters, nor the Congress, nor the leadership of the Department of Defense can be assured that anti-competitive procurement practices, mistakes, and instances of misconduct are not repeated.

Restoring the GAO's statutory responsibilities on procurement improvement recommendations and creating a central repository for information on bid protests would be useful in order to ensure that current contracting officials have the most up-to-date training possible by performing case studies of protest-related cases; it would also be very helpful for instructors in a protest-related source selection course to have contracting students perform case studies and learn from past mistakes in order to ensure better future performance.

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[94] For example, the GAO Statutory Report on FY1985 Bid Protest Activity to the Honorable George Bush, President of the Senate, B-158766 (Jan. 31, 1986) reported that in two bid protests corrective action was either limited or not available, but the Secretary of the Army and the Secretary of Agriculture were asked to take steps to prevent recurrence of violations in the future. Both Secretaries agreed with these recommendations. As a result, the Department of Agriculture admonished the contracting officer as to equal and fair treatment of offerors in best value procurements, and the Department of the Army took apparently procedural steps ensuring that sole source contracts are not awarded prior to the expiration of the required notice and waiting period. These remedies apparently vindicated the public interest without causing undue burden to agency operations.

C. Hypotheses

After analyzing the data and observing trends, seven different hypotheses were formed on how to improve the bid protest process in order to save the DoD time, money, and manpower.

A New Paradigm to Address Bid protests suggests that any proposal to reduce the rate of successful protests will involve either reducing the expected benefits of filing or litigating a protest, or increasing the expected costs (or some combination).

First, better—not necessarily more—training for contracting officials with a focus on better attention to detail will result in fewer mistakes when soliciting contractors, which will lead to fewer protests.

Second, if the Defense Department offers smaller, more frequent contracts, it will more often lead to contractors accepting the loss of an award as a learning experience; they will better prepare for future contracts instead of protesting the loss of the one current large procurement, a loss that shuts them out of the market for a long time.

Next, better tracking of protest information will enable researchers and auditors to periodically analyze trends and assure quality control of the procurement process.

Also, by including a rating on companies that considers frivolous protest history as part of the past performance rating during the source selection process, the DoD could influence the company's decision to protest unnecessarily in the event of losing a bid for a contract. To pass constitutional muster and meet the principles of fundamental fairness, the criteria for this rating must strictly conform to the standards for frivolous protests set forth in Rule 11 of the Court of Federal Claims and in judicial precedents.

Strategically manage/reveal/report Settlements: Government agencies often voluntarily give aid to protestors; this contributes to the effectiveness rate. If these agencies, specifically the DoD, stopped giving inappropriate voluntary aid to protestors before the GAO decision, they could reduce the spending of unnecessary resources in the event of a deny decision. On the other hand, if agencies took corrective action or entered into ADR without unnecessary delays and for proper reasons, agencies would avoid disruptions from mandatory stays and avoid needlessly paying the protester's legal expenses. Congress and the agencies should consider making all bid protests settlements public.

To better manage the protest process, agencies must require their acquisition managers to manage the protest process in a business-like manner by evaluating cost-benefit tradeoffs and decision steps in an appropriate and timely manner.

Finally, ADR should be made the default dispute resolution mechanism in bid protests, and agencies should be required to file justifications as to why they have not successfully used ADR. In addition, agencies should be required to justify their failure to use stay overrides and other flexibilities and defenses that would minimize the time and cost impacts of bid protests.

D. Recommendations to Reduce Risk of Protest

Goals:

1. Minimize fraud, favoritism, and corruption (build integrity, increase transparency, and improve accountability)

2. Maximize competition (increase the expected value of participation in agency procurement-solicitation and award processes)

    a. Assumption: "As the number of bidders rises, competition increases and the purchase price falls" (MMR, 1991, p. 3). An exception in which restricting bidders makes sense would be a case in which an agency would waste resources on evaluating the bids of clearly non-performing firms or of those with clearly inferior (or ill-matched) products. TCE suggests that if the expected surplus (e.g., production cost savings) that a firm could offer is not sufficient to cover the transaction costs of preparing and evaluating a bid, then it should be excluded. (However, the contestable markets threat of entry theory by Baumol et al. [1982] might justify including some of these firms.)

    b. One option is to compensate all bidders for their bid preparation costs (*CB*) to promote participation by more bidders (since $\partial V^*/\partial CB < 0$). In many complex and uncertain RFPs, bid preparation costs can be thought of as analogous to research and development costs. This is especially suitable for small business concerns and new entrants to the Federal procurement market.

    c. Another option is to not only compensate the winner for production costs that were bid, but also to provide the winner with a profit related to its advantage over its next-best rival. The profit earned by the winner should depend on the gap between its bid and the second-best bidder to provide an incentive for the winner to bid more aggressively and to provide a higher value (surplus) product.

    d. Protests can reduce the winner's profit by the costs ($C3$) required to defend against a protest (which might include settlement costs), where $C3=f(E, F, CF, C1, C2)$.

There is scant empirical evidence for judging what net effect the modern system of protest controls, including the CICA and related protest reforms, has had on procurement outcomes.

A rent-seeking argument suggests that influence activities are attenuated by protests, but are there less disruptive alternatives? The protest mechanism reduces the rents from influence activities in two ways. First, a successful protest deprives the influence-seeking firm of a contract and forces it to pay protest costs. Second, a settlement forces the winner to share part of the profit from improper influence. The reduction in expected rents causes investment in influence activities to fall, thereby increasing the probability of an efficient award and reducing wasteful rent-seeking activities.

E. Costs of Protests

1. Cost and opportunity costs of protest authorities; and costs and opportunity costs of collecting and analyzing information.

2. Cost and opportunity costs of resources used by protesting contractor, winning contractor and agency (prosecuting and defending protest): measure resources dedicated to personnel training, source selection, and defense of protests.

3. Schedule delays (delivery of goods and services): measure time required to purchase and field equipment with and without protests.

4. Reduced productivity and performance: measure user perception of quality and performance with and without protests.

5. Bidders charge government a price premium to compensate for risk of protests (either having to initiate a protest or defend against one).

6. Some government officials may be tacitly and improperly using the protest process to “buy a seal of approval” from the GAO for agencies’ procurement strategies, even at the risk of delays from mandatory stays and unnecessary legal expenses.

7. Strategic manipulation of protest process as barrier to entry (force new entrants to face higher entry costs of protest), or incumbent can delay contract award with protest; or seek information to increase competitive advantage in subsequent procurements.

8. Discourage government purchasing officials from exercising inappropriate discretion and considering important subjective factors when incomplete contracts cannot include all contingencies (past performance, forced to rely on objective criteria, reveal too early those

criteria and relative weights, reduces subjective evaluation of vendor responsiveness, etc.). TCE: If agencies cannot write a complete contract, then vendors have incentives to shirk in the provision of those dimensions that are undervalued or not explicitly requested in the RFP.

9. Bid rotation (bid rigging) cartel enforcement mechanism. “The protest enables cartel participants to challenge an award to a cartel member who [violates] the collusive agreement by bidding low ‘out of turn.’ The settlement process can facilitate efforts to extract side payments, including subcontracts (“greenmail”).

10. Reducing protest risks could increase competition. Protests are bad for winners (they reduce expected benefits) and good for losers (they provide a second chance). Need grievances addressed to encourage participation, but also impacts the likelihood the winner will engage since it increases the cost of the transaction (defending against a protest and delays). The net effect on competition (increasing number of bidders) is an empirical question: attempt to assess the effect of protests on the number and quality of suppliers and on resources spent to obtain government contracts or to raise funds in capital markets.

NOTE: The empirically small fraction of protests sustained suggests that agencies could more often appeal to urgent and compelling to override an automatic stay!

NOTE: Increasing protestor costs by increasing data collection (breadth of evidence gathering) has two offsetting effects. On the one hand, it increases the cost of a protest, which tends to reduce incentives to protest. But on the other hand, it might also make the protest more valuable by increasing the ability of protestors to obtain information suggesting procurement flaws (increasing the probability of merit and sustained given merit), and revealing additional information that may be useful in future competitions, increasing the incentive to protest.

Transaction Cost Economics (TCE) Hypothesis: The increased risk of protests increases transaction costs. (Winners lose and losers win: Fraction of Responsible Winning Bidders opting out = f(Fraction of Contracts Protested)). Institutions will be created to minimize transaction costs, or maximize the net benefit

from the transaction. What are characteristics of transactions that tend to draw protests?

Probit/Logit: Prob. of Protest = f(Complexity; Uncertainty; Frequency (length of contract; sequential contracts); Asset Specificity; Size of Contract; Purchase (split buy); Lease; Fee-for-Service; Alternative Opportunity; Settlement; Subcontract; etc.)

F. Recommendations

Transaction Costs Guidance—

1. Reduce Asset Specificity
2. Reduce Complexity—unbundle (invest in systems integration)
3. Reduce Uncertainty
4. Increase Frequency
5. Increase Contestability
6. Invest in Governance Mechanisms (Measurement, Monitoring & Oversight)

Suggestions (Note: legal and regulatory impacts have not been determined)

1. Demand Curves slope down: Make the prosecution of protest more difficult (reduce the probability of merit and of sustain given merit (*PM* and *PS*) and raise the costs of protests to reduce the volume of protests (*CF*, *C*1, *C*2).
2. Apply a more deferential standard (a presumption of agency correctness that removes the automatic stay) similar to the standard for injunctions used at the Court of Federal Claims.
3. Impose sanctions on frivolous protests in the manner of Rule 11 of the Court of Federal Claims.
4. Limit the number of protests allowed in a given period or over a given set of contracts. Limit future protests and protest appeals if the first protest is strongly denied. Again, these limitations should be modeled on traditional Rule 11 sanctions on repeated frivolous protest filings at the Court of Federal Claims.

5. Restrict time limits to file protests, especially to ensure that post-award protesters do not obtain pre-award remedies of total recompetition.

6. Increase financial costs of protests, e.g. by requiring bonds to compensate the government for the cost of stays similarly to Rule 65 of the Court of Federal Claims.

7. Loser pays—reimburse the government and winning bidder for the legal fees and costs associated with defending the purchasing decision, including any costs from schedule delays, cost overruns, and performance shortfalls due to the automatic stay. Make stays discretionary by allowing the protestor to request (or not request) a stay since loser pays (*C2*).

8. Amend the charter of the Armed Services Board of Contract Appeals by granting it the authority to administer and conduct ADR in bid protests.

9. Competition among rival government forums (including inter-agency competition) can improve the quality, reduce costs, and make more alternatives available to protestors.

10. Limit discovery tools (the ability of protestors to gather information) and/or use of discovered information so that protestors do not gain inappropriate competitive advantage over non-intervenors in future competitions.

11. Limit remedies for successful protests to ensure no unfair competitive advantage and promote public interest (*XA*)

12. Require exhaustion of administrative remedies (agency-level protests) before allowing GAO protests.

13. Preserve the perception of institutional and political neutrality.

14. Reduce the scope of protest oversight and increase the use of more cost-effective alternatives.

15. Reduce overhead costs and defensive medicine costs associated with bid protests.

16. Make it easier to assess the probable outcome of a protest.

17. Establish a streamlined procedures for obtaining Office of Federal Procurement Policy or Department of Justice support for disagreement with the GAO's protest recommendations.

18. Adoption of expeditious ADR as the default mechanism for resolving bid protests.

19. Increase incentives and align the interests of government procurement officials so that they invest in human capital and effort in order to improve procurement outcomes. Requiring agencies to justify failure to use ADR, stay overrides, or other protest resolution flexibilities should be the first step in this direction.

20. Facilitate pre-award protests in order to reduce post-award protests, but be careful what you wish for. This could lead to multiple stays and constant interruption and delays in the procurement process.

21. Impact of bid protest remedies in major cases should be subject to ex-post evaluation on procurement outcomes (Office of Federal Procurement Policy or GAO Acquisition and Sourcing Management).

22. Experiment with different levels of protest oversight and evaluate performance.

    a. Competition: Is the strength of protest oversight correlated with the willingness of buyers to do business with the government agency?

    b. Fraud, favoritism, and incompetence: What are the delays and value for money associated with protest oversight?

This study offers several important insights and policy recommendations:

1. A major challenge for the Defense Department is to reap the well-intentioned benefits of protests while limiting their the unintended consequences (costs and disruptions).

2. The costs of preventing or deterring inappropriate settlements is an additional transaction cost not clearly understood or appreciated in the current operation of the protest process. Evaluate the risk that protest systems might inadvertently motivate inappropriate settlements or inappropriate litigation strategies to protect procurement actions.

3. The risk of Fed-mail and Buy-off settlements warrants a serious rethinking by the GAO of its protest effectiveness rate measure. It also cautions against departments, agencies, or Congress implementing any analysis or recommendations that utilize this measure.

4. The data suggests that it may be appropriate (a) to overturn the implicit assumption that procurement officials (PO) are guilty until proven innocent that underpins the GAO's current automatic stay of disputed procurements, and (b) to replace it with the assumption that POs are innocent until proven guilty. Under today's binding regulations and statutes, this argues for departments and agencies to restrict stays (or injunctions) through more frequent use of (stay override) arguments such as "urgent and compelling circumstances" or "in the interest of the United States."

5. From the point of view of a protester, the economics approach suggests that there is no such thing as a frivolous lawsuit. A disappointed bidder will only file a protest if his expected benefits outweigh his expected costs. Frivolous lawsuits are an example of the strategic use of protests by firms when the reasons for protests are inconsistent with the public interest.

6. In shaping protest policy, senior leadership should focus its attention on critical procurements—i.e., on those acquisitions likely to have the greatest impacts on investments and operations if they are protested—and possibly, but not necessarily, on high-cost MDAPs. To help shape protest policies, focus on identifying and addressing key factors and characteristics associated or correlated with successful protests of critical, high-impact procurements.

7. Balancing the benefits of protests against the potentially significant (opportunity and transaction) costs suggests that there is an optimum rate of successful protests.

8. Regardless of where the Department happens to be relative to the optimum, there exist policies to reduce successful protests that can actually increase competition.

9. While selected policies that reduce Defense Department protest risks might increase risks faced by losing bidder types, hurting competition, they could reduce risks faced by winning bidder types, boosting competition. The net effect is an empirical question with enormous policy implications that warrants an empirical study to investigate this issue.

10. Although a fear generally expressed in the legal and regulatory literature is that limiting protests will inhibit competition, resulting in higher costs, those costs could be more than offset by reductions in delays and disruptions from fewer protests.

11. The challenge is to choose an optimum mix of governance mechanisms that minimizes the costs of aligning incentives—to reduce the risk of fraud and errors and encourage competition—and that guarantees the best possible procurement outcomes for our troops and taxpayers.

12. Ideally, policy initiatives to limit protests could be combined with other carefully selected, cost-effective governance mechanisms (internal audits, external audits, independent investigations, training investments, etc.) that reduce the need for the monitoring and oversight role of protests.

13. The challenge is to choose the most cost-effective mix of initiatives that align incentives and that provide adequate monitoring and enforcement of procurements to reduce the risk of fraud and errors, and to encourage competition. In searching for alternative approaches, the optimum mix will include targeted investments in human capital as well as in centralized (audits and investigations) and decentralized (bid protests) third-party governance mechanisms.

14. Because most agency protest decisions are not published, there is limited transparency, and the lack of a record of precedent deprives future protesters of the benefit of the agency's reasoning on prior decisions. It also deprives agencies of the opportunity to learn from the process in order to improve their processes and procedures. A recommendation is for agencies to publish their protest decisions.

15. GAO should again make recommendations to agencies on prospective improvements in their procurement processes following each bid protest where the protest was found meritorious or subject to corrective actions. GAO should include those recommendations, as well as the most common grounds for sustaining protests, in its annual report to Congress.

16. A recommendation is to seek a broader mix of reviewers for protests within the GAO that includes subject matter experts (SMEs) and economists, especially to assess the costs and benefits of delays and remedies.

17. The operation of the current protest system reflects an assumption that the costs of protests are less than the costs of relying on alternative monitoring and enforcement mechanisms that would achieve the same policy goals (integrity, equity, efficiency) and “ensure the proper functioning of the procurement system, and to promote confidence in the system.” A recommendation is to evaluate the costs and benefits of alternative approaches that might improve procurement outcomes—including human capital investments and third-party governance mechanisms.

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VI. Recommendations and Areas for Further Research from the Companion Report, Better Acquisition Management through Alternative Dispute Resolution (ADR) and Other Best Practices for Preventing and Resolving Bid Protests

A. Recommendations

1. Case for Fiscal Disincentives beyond Truly Frivolous Protests is not Demonstrated, But GAO Rules Must Include COFC-Style Sanctions

Our research has revealed that agency personnel have strong opinions regarding the need for some type of disincentives for unsuccessful protestors. The opinions range from "loser pays" scenarios, where the losing party to the protest must reimburse the other for the cost of the unsuccessful litigation, to more reserved opinions, where penalties are only assessed for those protests that are deemed to be truly frivolous.

There is no doubt that the lack of disincentives for filing an unsuccessful protest may contribute to the litigious desires of a would-be protestor. Nonetheless, we are not convinced that such disincentives are prudent, Constitutional, or conform to international obligations of the United States. While such a procedure may very well reduce the negative impact frivolous protests have on the acquisition system, it may do so at the expense of legitimate protests. Such disincentives may actually discourage participation in the federal contracting process and as a result competition may decrease. (GAO, B-401197, 2009, 13). Further, in order to determine whether or not a protest is indeed frivolous, it would require additional action on the part of the GAO. Currently, GAO determines initially whether or not a protest meets the requirements for filing a protest (timely, an interested party, etc.) and subsequently determines the merit of the protest. In order to determine that a

protest is sanctionable as frivolous, GAO would have to make a separate determination. This new determination may provide deterrence, but at the cost of additional litigation. Further, unless carefully crafted, such disincentives or penalties will likely run afoul of the U.S. Supreme Court's First Amendment protections for the right of free speech and the right to petition the government for the redress of grievances, or the Fifth Amendment right to due process of law. For example, the Supreme Court held in *Bill Johnson's Restaurants, Inc. v. National Labor Relations Board* (461 U.S. 731 (1983)), that a Federal agency cannot halt lawsuits brought even for improper motives unless those lawsuits are based on "intentional falsehoods or on knowingly frivolous claims," or otherwise lack a reasonable basis. In another case, *California Motor Transport Co. v. Trucking Unlimited* (404 U.S. 508 (1972)), the Supreme Court held that Federal antitrust laws may penalize businesses bringing lawsuits and petitions to Federal agencies only if such petitions and lawsuits are "a mere sham to cover what is actually nothing more than an attempt to interfere directly with a business relationship of a competitor." Federal appellate courts also identified two limited ways which can render a legal action frivolous: "First, a legal action is considered 'frivolous as filed' when a plaintiff or appellant grounds its case on arguments or issues 'that are beyond the reasonable contemplation of fair-minded people, and no basis for [the party's position] in law or fact can be or is even arguably shown.' . . . Second, a legal action is considered 'frivolous as argued' when a plaintiff or appellant has not dealt fairly with the court, has significantly misrepresented the law or facts, or has abused the judicial process by repeatedly litigating the same issue in the same court." (GAO, B-401197, 2009, 11). Any restriction, disincentives, or penalties for strategic protests against the public interest would have to meet the Federal courts' stringent requirements. Finally, the United States agreed to provide effective bid protest mechanisms as part of the World Trade Organization Agreement on Government Procurement and agreed to effective non-discrimination in procurement as part of Reciprocal Defense Procurement and Acquisition Policy Memoranda of Understanding. (Miller, 2009, 93). Care must be taken to ensure that any restrictions conform to our international trade obligations and agreed-upon standards of fairness.

The U.S. Court of Federal Claims provides a useful model for sanctions against improper bid protests. Under Rule 11 of the Rules of the Court of Federal Claims, a protester can be sanctioned only if the protest:

(1) is being presented for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation;

(2) the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law;

(3) the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery; and

(4) the denials of factual contentions are warranted on the evidence or, if specifically so identified, are reasonably based on belief or a lack of information.

Necessarily, a protestor would have some right to due process in order to "avoid punishing a company for filing a good-faith but unmeritorious protest." (GAO, B-401197, 2009, 13). This process may actually make the overall protest process longer, which could have potential negative impacts on the acquisition system. However, bringing the GAO Bid Protest Regulations to parity with COFC concerning sanctions for truly frivolous protests could provide a deterrent and, more importantly, address the perception that GAO may be welcoming frivolous protests.

2. Standards for Mandatory Stay Overrides in CICA and Agency FAR Supplements Must be Clarified and Re-Balanced to Protect Taxpayers and the Troops, Not Just the Protesters

Our research demonstrates that contracting agencies must be much more aggressive at issuing and defending overrides of mandatory CICA stays triggered by filing GAO protests. At the same time, our research shows that the fault does not lie entirely with the agencies. COFC interpretations of what CICA requires to sustain an override seem to be clearly in conflict with each other and with the question most

important to the contracting agency, that of validity of contract awards. These COFC interpretations seem to lack balance between the interests of the protesters and of the taxpayers, the troops, and Federal agencies. Congress, the Comptroller General, and the Federal contracting issues should clarify and strengthen the CICA override standards.

3. Agency-Level Protests Must Be Made More Transparent and Trustworthy to Be Truly Effective

Our research reveals that experts in Federal agencies recognize the value of agency-level protests as a speedier, less costly, less adversarial alternative to litigation. The Army Materiel Command experience is particularly instructive on this point. However, contractors appear to distrust the agency-level protest process. If Congress and the Executive Branch are serious about reducing litigation delays and costs, they may want to improve the transparency and trustworthiness of the agency-level protest process. Specifically, CICA and FAR Part 33 may be amended to provide for greater disclosure of procurement information, mandatory impartial review above the contracting officer level, publication of agency-level protest decisions, and continuation of mandatory stays between agency-level protests and any subsequent GAO protests. Once agency-level protests earn the trust of the Federal contracting community, it may be worthwhile to require contractors to exhaust their agency-level protest remedies before filing protests with the GAO or the Court of Federal Claims.

4. ADRA Must Be Strengthened to Limit Grounds for Refusing ADR

Our research reveals that at least some Federal agencies may be tacitly condoning or encouraging the litigation of bid protests at the GAO. While ADRA allows the U.S. government to decline ADR in certain circumstances, our research shows that contracting agencies are litigating bid protests far more often than even the agencies themselves find appropriate. In addition, our research reveals that agencies go along with GAO protests for improper reasons not authorized under

ADRA. Congress should take steps to toughen ADRA in order to ensure that agencies are not "buying" GAO decisions with taxpayer funds.

5. ADR Should Be the Default Dispute Resolution in Federal Procurement Protests

Our research shows that the Executive Branch has extensive experience with ADR as the default bid protest resolution system. Originally created as an exceptional experiment, the protest system at the Federal Aviation Administration ODRA demonstrated its ability to provide significant time savings and achieve protest resolution in a less disruptive manner than the GAO protests. Congress should now take the FAA ODRA lessons and replicate them across the Federal government.

6. Agencies Must Be Required to Vigorously Object to GAO Protests when Appropriate

Related to the matter of frivolous protests are agency actions designed to properly document their objections to a protest. The GAO "dismisses protests, where appropriate, without the need to resolve whether the protest was frivolous." (GAO, B-401197, 12). It is incumbent on agencies however, to object to protests when appropriate. Our research revealed that many top acquisition and legal professionals believe frivolous protests frequently preclude effective resolution of bid protests. Yet the very same individuals indicated that they believe their agencies infrequently raise vigorous objections in response to frivolous protests. Indeed, the last recorded "frivolous protest" objection was reported by the GAO back in 1996. Since the GAO will dismiss protests that are frivolous or without merit, it is incumbent upon agency officials to raise objections to protests they deem to be frivolous or otherwise without merit.

7. Agencies Must Provide Quality Mandatory and Non-Mandatory Debriefings to Prevent or Limit Strategic Protests

Numerous survey respondents provided comments regarding the strategic reasons that may induce an unsuccessful offeror to file a protest. One respondent called such protests "fishing expeditions" while another stated it was a means to "circumvent FOIA." Respondents' rationale is that by filing a protest, even if ultimately unsuccessful, the protestor may obtain some information that he can later use to his advantage. One means by which agencies can prevent such behavior is to provide a high quality debriefing, regardless of whether a debriefing is mandatory. If an unsuccessful offeror has been thoroughly debriefed as to why he was not selected for award, he may not feel he needs any additional information, and as a result he may be less inclined to file a protest. A thorough debrief may also convince an unsuccessful offeror that he was in fact not prejudiced by the agency's decision and therefore has no need to file a protest.

Even with complete and thorough debriefings, some protestors will want to file a protest in order to seek information not otherwise available to them. A change in agency policy could prevent this occurrence. The information asymmetry that exists between the government and unsuccessful offerors may very well influence an offeror's decision to protest. Government agencies can prevent this from occurring by eliminating or reducing the asymmetry. Information that is normally made available to an unsuccessful offeror only after having filed a protest should be made available to the offeror absent a formal protest filing. This may eliminate one incentive that an unsuccessful offeror has in filing a protest.

8. Defense Agencies Should Object to GAO Recommendations Whenever Military Needs So Require, and the Office of Federal Procurement Policy and the Department of Justice Should Streamline the Process for Supporting Federal Agencies When the GAO Gets It Wrong

Our research revealed that Federal and especially defense agencies tend to follow the GAO blindly. Significantly, not once did a defense agency refuse to follow GAO recommendations in order field equipment to the troops. Agencies have traditionally feared Congressional sanctions for refusing to follow the GAO, but research proves that this fear is unwarranted. Indeed, our research shows that during the 2009-2010 dispute between the GAO and the Department of Defense concerning the latter's refusal to follow the former's protest recommendations, the Office of Management and Budget, the Department of Justice, Congress, and the President took the side of the Department of Defense. However, the process for agencies to secure high-level support against wrong GAO recommendations is not well-established within the Executive Branch. The Federal Acquisition Regulation Council should make appropriate amendments.

9. CICA and GAO Regulations Should Require Protesters to Post Bonds for the Cost of Interruption from CICA Stays

Our review shows Federal agencies may not have sufficient tools to reduce costs and delays from mandatory CICA stays. On the contrary, under Rule 65 of the Court of Federal Claims, "[t]he court may issue a preliminary injunction or a temporary restraining order only if the movant gives security in an amount that the court considers proper to pay the costs and damages sustained by any party found to have been wrongfully enjoined or restrained." Further, under COFC Rule 65.1, "[t]he surety's liability may be enforced on motion without an independent action." Congress or the GAO should introduce similar rules in GAO bid protest in order to compensate the taxpayers for the costs of at least some protests that are ultimately found to lack merit.

10. Agency Lawyers and Acquisition Workforce Must Be Trained to Resolve Bid Protests in Accordance with Least Disruptive Paths

Our research reveals that opportunities abound to utilize ADR and other dispute resolution flexibilities even under current GAO Regulations, COFC Rules, and agency-level protest rules in FAR Part 33. Unfortunately, our research also reveals that agency rarely utilize all the tools available to reduce delays and costs of bid protests. In the beginning of this paper, we showed that it is possible to map out with great detail the least disruptive and most cost effective paths for resolution of bid protests, as well as related decision points. Accordingly, we demonstrated that Federal contracting officials can manage the bid protest process in the same business-like manner as they manage other programs. However, our survey data reveals significant gaps in the understanding of ADR and other flexibility tools by top Federal acquisition experts. Therefore, it is imperative that agency protest resolution procedures and related training programs for the acquisition workforce be revised and improved in order to help contracting officers master the least disruptive and most cost effective resolution paths. This is training is particularly important in military agencies, which are characterized by lower incidents of negotiation and other types of ADR than civilian agencies.

11. To Reduce Protests, Federal Agencies Should Design Acquisition Strategies Promoting Maximum Possible Competition

Our research shows that some of the most effective ways to prevent bid protests is to design competitive acquisition strategies. These strategies involve breaking up large consolidated contracts into smaller contracts, including the awarding of multiple-award contracts instead of single-award contracts. The substantive provisions of the Competition in Contracting Act at Title 10, Section 2304, the Small Business Act at Title 15, Section 644, the anti-consolidation legislation in Title 10, Section 2382, and FAR Part 16.5 all compel emphasis on such competitive contracts. Now, Federal agencies must swiftly implement these statutes

not only because that is required, but because doing so makes business sense and compensate the taxpayers through reduced protests and more efficiency.

12. Federal Regulations Should Require Parties and Agency Acquisition Officials to Justify and Document Decisions not to Initiate or Use ADR, Stay Overrides, Express Options, Sanctions for Truly Frivolous Filings, and other Similar Tools

Our review of the Federal Aviation Administration ODRA procedures highlighted the primary use of ADR to resolve protests. We noted the fact that ODRA was able to resolve protests more quickly than when compared to the GAO's bid protest process. Within ODRA, there is an overriding presumption that parties will resolve protests through ADR. If unable to utilize ADR, both parties must submit explanatory statements to the Dispute Resolution Officer. The presumption that parties will utilize ADR, unless there is a countervailing reason to the contrary, is a primary driver behind ODRA's processes. The GAO in its regulations and the Executive Branch through the Federal Acquisition Regulation or agency supplements should adopt a similar procedural policy, and require each party to conduct cost-benefit analysis and affirmatively demonstrate why ADR cannot be utilized to resolve the protest. Such a policy would likely reduce the time delays and costs an agency must endure during a bid protest. Agencies should also be required to formally demonstrate why it does not seek dismissal as frivolous or meritless, sanctions, early corrective action, or stay overrides. Any such justification documents must include business analysis that the costs of formal litigation under the regular process at the GAO and compliance with the GAO recommendations would outweigh the benefits of ADR and/or expedited procedures. The analysis should take into account potential for disruption that can be created when a post-award protester may seek a pre-award remedy of cancellation and change in the acquisition strategy. Agencies should be proactive in initiating ADR and not wait until the GAO's negotiation assistance or outcome prediction.

B. Areas for Further Research

Our research has revealed a number of further areas of study that warrant additional research. Specific areas of study include:

- Analyze and document contractor motivation to file a protest. Such research should include a thorough understanding of the business decisions that either constrain or enhance a contractor's motivation to file a protest.

- Conduct further analysis into debriefing procedures. Best practices for conducting a successful debriefing need to be researched and documented.

- Research into areas of strategy and practices that survey respondents cited with minimal frequency. A number of these strategies and practices appear useful in mitigating the negative effect of reducing the impact of bid protests, yet they are underreported in our research. Further study into this area should be conducted.

- Acquisition planning is cited the most commonly cited strategy or practice to minimize the impact of bid protests on the acquisition process. Best practices for all facets of acquisition planning should be researched and documented.

- The lack of financial disincentives for unsuccessful offerors was a highly cited policy that precludes the effective resolution or avoidance of bid protests. Although we have previously stated our recommendation on this policy, we nonetheless feel that further research is warranted. Specifically, research must be conducted into the negative externalities that may be associated with financial disincentives.

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